

## Bulletin

## DICKINSON COLLEGE

## 1976-1977

Carlisle, PennsyIvania 17013

## ACCREDITATION

The principal accrediting agency for the College is the Middle States Association of Colleges and Secondary Schools. Other agencies accrediting or recognizing Dickinson are the University Senate of the United Methodist Church, the Pennsylvania Department of Education, the University of the State of New York, and The American Chemical Society.

## DIRECTIONS FOR CORRESPONDENCE



# 1976-1977 Bulletin <br> DICKINSON COLLEGE 

Carlisle, PennsyIvania 17013

Founded 1773


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## THE AIMS OF EDUCATION AT DICKINSON

The educational philosophy of Dickinson College is written in the two hundred years of its rich and troubled history. Students and teachers have come to this College over the years for a variety of reasons and have left to pursue a wide diversity of ends.

These can be summarized in three ideals: learning, liberty, virtue. Taken together they define the aims of the College to be a quest after knowledge for its own sake, but also as leading to involvement in practical affairs for the sake of social good and individual dignity.

This cluster of educational purposes was recognized by the "Representatives of the Freemen of the Commonwealth of Pennsylvania in General Assembly met" when they granted Dickinson College its charter in 1783. "The happiness and prosperity of every Community," they said, "depends much on the right education of the Youth who must succeed the Aged in the important offices of Society. The most exalted Nations have acquired their preeminence by the virtuous principles and liberal knowledge instilled into the minds of the rising generation." Therefore they proclaimed the creation of a
college dedicated to "the instruction of Youth in the learned languages" and in the "useful arts, Sciences, and Literature."

Benjamin Rush expressed these same aims with eighteenth century elegance when, appealing to Charles Nisbet to come from Scotland as Dickinson's first president, he extolled the peculiar virtues of education in the frontier west of Susquehanna. "Human nature," said Rush, "here (unsubdued by the tyranny of European habits and customs) yields to reason, justice, and common sense. Come sir, and spread the influence of science and religion among us. America seems destined by heaven to exhibit to the world the perfection which the mind of man is capable of receiving from the combined operations of liberty, learning, and the gospel upon it."

## Learning for its own sake

Liberal knowledge, learning for its own sake and for the cultural enrichment it provides, is the oldest and most fundamental aim of Dickinson education. The first curriculum generously encompassed the fields of available scholarship: Rhetoric, Literature, Composition, Latin and Greek, Mathematics, Astronomy, Economics, Political Economy, and Moral Philosophy. Learning in this classical sense has been the bedrock supporting and eventually outlasting the various other purposes through which the College in ever changing ways has sought to be relevant to the times in which it found itself.

President John Durbin, in the 1830's, epitomized the aspirations of this ideal when he insisted that "the grand design of education is to excite, rather than to pretend to satisfy, an ardent thirst for information; and to enlarge the capacity of the mind, rather than to store it with knowledge, however useful."

## The useful arts of liberty

In addition to learning is liberty. Dickinson College was chartered to secure the "happiness and prosperity" of the nation by educating the rising generation in the arts and knowledge which would enable them to succeed their elders in the "important offices of Society."

In accord with this goal, graduates of the College have distinguished themselves in state and national public office, in law, medicine, and the ministry. The College was embroiled in abolitionist controversies in the pre-Civil War decades, and in the 1880 's it opened its doors for the first time to women and to blacks. A Department of Peace and Public Service existed for a time in the early part of the twentieth century. More recently off-campus and intern programs, as well as a system of all-College governance, have offered students an opportunity to enrich their learning through involvement in its civic and pragmatic applications.

A statement from the 1960's encourages Dickinsonians to see their world as one in which "the educated man is able, by virtue of the power gained
through knowledge, to influence both his environment and the course of history," and thereby to use "his power in the service of the human community." In this way learning bears the social fruit of liberty.

## Virtuous principles

Without "virtuous principles," however, knowledge and power are incomplete. The original charter, although insisting upon the autonomy of the College from all ecclesiastical control, acknowledged that the happiness and prosperity of Community can be accomplished only "under the direction and government of divine providence." Benjamin Rush's 1785 Plan of Education began by insisting that "the fear of the Lord is the beginning of wisdom, and should be the end \& Object of all education."

During the 1830s, the Presbyterian propriety gave way to Methodist piety: the common sense realism of Charles Nisbet's required course in Moral Philosophy was supplanted by President Durbin's early morning chapels. In the years that followed, professors like John McClintock and students such as Moncure Conway brought their high sense of ethical idealism to bear upon the confusions of the times, and are remembered with awe for the courage with which they lived their convictions.

Today, the College's religious and moral purposes have been enlarged to embrace the whole world of human values and commitments. The College seeks an atmosphere in which a diversity of beliefs can be encountered, their claims upon a person critically assessed, and the significance of each fully appreciated. The College aspires to provide a context in which each person might deepen his understanding of the values which are rooted in his past and find their relevance to the social and personal issues of the day.

## Pluralism of purposes

Dickinson College's pluralism of purposes is thus embodied in its past. Its educational philosophy has been to be a college of the liberal arts emphasizing classical learning and the disinterested pursuit of truth, a pre-professional college training a rising generation for public service and involvement in social change, a developmental college fostering individual maturation and the discovery of moral values.

The College has grown through two centuries as a result of the tensions and confusions bred by these many-sided and often contradictory aims. Most profoundly, therefore, its purpose lies in sustaining an educational environment in which these varied ends can thrive, each vying for the loyalties of students and faculty, each learning from the others, together furnishing the means by which "reason, justice, and common sense" might prevail and the nation's youth prepare themselves for the responsibilities and opportunities of adulthood.


## A BRIEF HISTORICAL SKETCH

Dickinson College dates its founding from March 3, 1773, when Thomas and John Penn deeded a town lot to the trustees of the Grammar School in Carlisle. This is the earliest legal record of a "classical academy" which had existed as an adjunct of the Presbyterian Church since the 1760 's, and which, by its charter of September 9, 1783, became Dickinson College.

That transformation was due entirely to the idealism and energy of Benjamin Rush, physician, teacher of medicine and signer of the Declaration of Independence. The old Board of Trustees was then enlarged from nine to forty, bringing in men of influence in every part of the state, and was established as a self-perpetuating corporation independent of sectarian control. Chief among those whom Rush had enlisted in his cause was Governor John Dickinson, "Penman of the Revolution," who served for many years as President of the Board of Trustees.

## Need for expanded education

When Rush first conceived his plan in 1782, the end of the long war for independence was in sight. He and those with him acted upon the need for an expanding educational system if the new nation were to survive as a democracy. They met it with this new college "over Susquehanna," in what was then a village and military post on the western frontier. Rush brought to it as the first of its long line of presidents Dr. Charles Nisbet, Scottish theologian and graduate of the University of Edinburgh, famous for his great learning and remembered as a brilliant and effective teacher.

The schoolhouse between Liberty Alley and Pomfret Street was enlarged, the Grammar School continuing (as with most American colleges for a century and more) an essential element in maintaining a standard of preparation. Here, and in the neighboring court house, classes went on for two decades.

The move to the larger John Dickinson Campus of today came in 1804 with the opening of West College. "Old West" replaced an earlier building burned before completion and among the many who rallied to the aid of the College in meeting this disaster was Benjamin Latrobe, America's first professional architect and designer of the nation's Capitol.

Now a Registered National Historic Landmark, West College stands as one of the finest surviving examples of his work and of American Georgian architecture. Latrobe's cupola was inspired by the Temple of the Winds at Athens with its fish-tailed god of the sea as weathervane. This last feature, under the sympathetic eye and hand of a Carlisle coppersmith, took form as the little Mermaid who was to become the emblem and presiding deity of the campus at Carlisle.

## Methodists assume control in 1833

The foundation laid by Dr. Rush looked both to continuing support by the Presbyterian Church and to a public endowment. The first diminished as the second increased until, in the early nineteenth century, Dickinson was virtually a state institution. Neither, however, was entirely adequate. In 1833, by an agreement with the Methodist Church, the old Board resigned and was replaced by Methodist clergy and laymen operating with funds held by their neighboring conferences. A building was acquired for the Grammar School and a new one, East College, now the Bernard Center for the Humanities, was completed in 1837.

The Methodist society had growth with great rapidity, much on the frontier and among the poorer classes. This was one of its earliest moves to sponsor higher education. The new faculty and the new president, John Price Durbin, were well aware that a close sectarianism would deprive their students of cultural advantage, and that a broad liberal arts program would broaden the Church as a whole.

The aim of this faculty, which Moncure D. Conway, author and anti-slavery leader, pronounced "not surpassed in ability by any in America," was "not to make us preachers, but to make us leaders of men, whatever our avocation." The new faculty, too, was careful to preserve the student organizations and traditions of the preceding half century.

## Civil War brings crisis

The Civil War brought a new crisis to the College, about half of whose student body had always been drawn from the South. Briefly, in 1863, Confederate invaders bivouacked on the campus and, after Gettysburg, East

College served as a hospital. It was in the years of post-war expansion that alumni contributions began the endowment funds of the College itself, supplementing and then surpassing the income from those of the conferences.

In this growth the independence of the trustees under the College Charter was reasserted without severing the historic church alliance. In 1933, the Mooreland estate, now the Benjamin Rush Campus, was acquired. This doubled the size of the campus and, under the previous administration, the whole has been expanded westward, with a complex of new buildings in both areas.

In Dickinson College history one sees the teacher, student and alumnus of today against a background of two hundred years, the moods of the past clearly reflected in those of the present. Professors of the eighteenth century felt the same concern for their times, the same responsibility to transmit the cultural heritage of civilization. Their students often rebelled against a prevailing emphasis on classical lore, demanding a relevance to contemporary life which Benjamin Rush himself had championed.

Dickinson's two student literary societies, Belles Lettres, founded in 1786 , and the Union Philosophical of 1789 , forming two enclaves of independent activity and self-government, debated contemporary issues, read original papers, and maintained libraries which were for many years of far more immediate interest and value than that of the College.

## Curriculum modernized at early stage

In the curriculum, modern languages came early to the fore, and the sciences were emphasized from the beginning, with Thomas Cooper and Spencer Fullerton Baird outstanding figures in advancing them. Noteworthy in the academic expansion of the 1880 's were the first science building, Tome, the first library building, and the establishment of Pennsylvania's Alpha Chapter of Phi Beta Kappa. Coeducation began at this time. In a sharp confrontation with indignant young manhood, the first women students amply demonstrated their scholastic equality.

The history, and the success, of a college is seen also in the careers of its alumni. Dickinson has always turned to her long roster of state and national leaders with pride. A graduate of the old campus on Liberty Alley became Chief Justice of the United States Supreme Court. One of the first boys to room in "Old West" went on to Congress, the diplomatic service and the White House. By these and many others, from those earliest days of the little frontier school "over Susquehanna," on down into our own times, the aspirations and ardors of the Dickinson years have been reflected in the world around us.


ADMISSIONS

Dickinson College desires students whose intellectual ability and achievement, whose motivation, creativity, self-discipline and potential assure their success in a selective academic community. As important to the College are students whose character and personality have won respect as the result of their accomplishments, their interest in others, the things they value and are enthusiastic about, and their special talents or abilities. In other words, the College wants students who are well-read, academically alert, interested in scholarly excellence, and likely to make a contribution to the quality of campus life by their participation, their concern for the well-being of others, and their talents which find expression outside the classroom.

The Admissions Staff seeks to identify students whose goals are in harmony with the aims of a liberal education as it exists in the Dickinson environment.

Aware that students from various social, ethnic and economic backgrounds contribute to the richness of campus life, the College welcomes applications for admission from a diverse group. Recognizing that some students may not have had the advantages of a full preparatory experience, the College seeks to assist such students in the transition to Dickinson.

It is the policy of the College to create a freshman class from the most qualified candidates in its applicant pool. Therefore please be assured that Dickinson has neither quotas nor formulas that would in any way discriminate in admission on the basis of sex, race, color, creed, religion, national origin, financial need, geographical area, or the number of applicants from any one school.

The College has a stabilized enrollment of about 1630. Each applicant is carefully considered in terms of his/her personal academic credentials. Along with the evidence supplied in the application form, the College also considers records and statements from secondary schools and test results including the College Entrance Examination Board (CEEB) and/or the American College Test (ACT). Students interested in a particular field of study may wish to submit a portfolio of their work for review directly to the appropriate academic departments.

## ADMISSION PROCEDURES

The admissions application and secondary school transcript form may be obtained from the Office of Admissions. A fee of $\$ 20.00$ is required at the time the application is submitted. This fee is neither refundable nor credited to any account. Regular decision candidates should apply prior to March 1 of their senior year. Early Decision candidates should apply prior to December 15. Regular decision candidates will be notified of the admission decision between March 1 and March 30. Early Decision candidates will be notified beginning December 1 and by no later than January 1.

## INTERVIEW

A visit to the campus for an interview or information session is helpful to prospective students in gaining a clearer understanding of life and study at Dickinson. It is with a view to providing greater insight into the College, rather than as a technique of selection that the interview and visit to the campus are encouraged.

Personal interviews may be scheduled with an Admissions Staff Representative between 9:00 a.m. and 4:00 p.m. Monday through Friday from April 1 through December.

During JANUARY, personal interviews may be scheduled on each Monday, Wednesday, or Friday, and on each Monday and Friday in FEBRUARY. During MARCH, personal interviews can be given only on each Friday.

Students are welcome to attend group information sessions which are conducted by professional staff members on Saturday at 10:30 a.m., September through April and on Monday, Wednesday, and Friday at 1:30 p.m. throughout the year except when the College is closed for legal holidays.

Appointments should be made well in advance of a planned visit by writing or calling the Admissions Office at area code 717-243-5121, ext. 231.

## ADMISSION REQUIREMENTS

THE MINIMUM REQUIREMENT FOR ENTRANCE TO DICKINSON COLLEGE is the satisfactory completion of a secondary school program of at least sixteen units, including four units of English, two (preferably three) units of one foreign language, two units of natural science, one unit of a social science and two (preferably three) units of college preparatory mathematics. The remaining units should be within these academic areas. Most applicants offer more than the minimal requirements.

STANDARDIZED TEST REQUIREMENTS: The Scholastic Aptitude Test (SAT) or the American College Test (ACT) is required of all applicants.

Results of either test taken in the junior year must be submitted for Early Decision. All admissions candidates taking either test in their senior year should take them in November, December or no later than January.

COLLEGE BOARD ACHIEVEMENT TESTING-Achievement testing is not required for admission to Dickinson. However, if a student wishes to satisfy a prerequisite requirement and place out of, or into a higher level course (such as foreign language), that person should plan to take an achievement test or Advanced Placement Test in the appropriate area. On the basis of this testing, the student will then be placed at the appropriate course level. Those students interested in majoring in the sciences or in math are encouraged to take either Math Level I or Math Level II College Board Achievement Tests in addition to other appropriate achievement tests.

It also should be noted that while achievement testing scores submitted prior to evaluation of an applicant's admission application will not be used detrimentally, in many cases strong achievement testing available during the application review process will be beneficial in a student's admission. For these reasons many students may wish to take selected College Board Achievement Tests.

Applications and schedules for these examinations may be obtained by writing to the College Entrance Examination Board, P. O. Box 592, Princeton, New Jersey, 08540.

FOREIGN STUDENT ADMISSIONS: Dickinson College encourages those foreign students to apply for admission who have successfully completed their secondary school requirements and whose knowledge of the English language (as indicated by their score on the TOEFL examination-the Test of English as a Foreign Language) is of sufficient quality to demonstrate minimum difficulty in pursuing a collegiate program. All inquiries should be directed to the Admissions Office.

PARTICIPATION IN ADVANCED PLACEMENT PROGRAM: A student who achieves a grade of four or five on a College Entrance Examination Board Advanced Placement Test will be granted credit for college work in the appropriate department, and will receive placement at the discretion of the department.

A student who achieves a grade of three on the Advanced Placement Test may receive, at the discretion of the appropriate department, credit and/or placement.

Subject matter areas for which no advanced placement examinations exist, and which have been taken at an advanced level, may be evaluated, upon petition, by the relevant department for advanced status.

Credit granted in accordance with the above statements of policy will satisfy the corresponding graduation or distribution requirements. In addition, such course credit will satisfy the prerequisites requirement in that department for advanced work.

## EARLY DECISION

The qualified candidate for whom Dickinson is clearly the first choice may apply for Early Decision. Such students must apply prior to December 15 of the senior year and should schedule interviews before that date. The results of the Scholastic Aptitude Test (SAT) or the American College Test (ACT) taken in the junior year must be submitted for Early Decision. The Early Decision Candidates are given some preference in the admissions process over regular applicants; however they must be clearly qualified in order to be offered admission. The Early Decision Candidates will be notified between December 1 and January 1 as their applications become complete. Regular decision candidates will be notified between March 1 and March 30 .

## EARLY ADMISSION

Any student who has accelerated academically is considered as an Early Admissions candidate. An individual interview is required of all students applying in this category. Applications for Early Admission will be reviewed on an individual basis, taking into consideration maturity and readiness to participate in a residential college, as well as academic ability. An Early Admission applicant must have the written recommendation of his/her secondary school counselor.

## DEFERRED ADMISSION

Some students may wish to defer the start of their college experience until they have pursued an alternative activity for a year or two. While an application is filed for a specific entrance date-and committee action is taken for that specific date-a student may request the application to be deferred for a later date of review. Such a review of the credentials is possible with the consent of the Admissions Committee.

## SPRING TERM ADMISSION

Any student who has officially graduated from a secondary school is automatically eligible for spring term freshman admission consideration if he/she has not enrolled on a full-time matriculated basis at another college.

The College will also consider for spring term admission, upon the consent and recommendation of the candidates' guidance counselors, students who are currently high school seniors and who wish to start college early.

Transfer applicants for the spring term are also eligible for consideration providing that the candidate has been enrolled as a degree student for the equivalent of at least two semesters prior to the term of desired enrollment at Dickinson.

The application deadline for spring term freshman and transfer admission is December 1 and notification will take place by January 1.

## DICKINSON GUEST STUDENT PROGRAM

Dickinson College welcomes students who wish to study here on a fulltime, non-degree status for either one or two successive terms, "in absentia" from their present college. This program is specifically designed for those students who wish to participate in the high quality academic and extraacademic life of a small college community.

Application deadlines are December 15 th for Spring term admission and August 1 for Fall term admission. For further details regarding the Guest Student Program, please write directly to the Director of Admissions at Dickinson College.

## TRANSFER STUDENTS

Dickinson College welcomes qualified applicants with previous academic work at other accredited college-level institutions. An applicant normally will be considered for transfer admission if he or she will have been enrolled as a degree candidate for the equivalent of at least two semesters prior to the term of desired enrollment at Dickinson. Applications for admission should be submitted to the Director of Admissions before June 1 for the fall semester and December 1 for the spring semester. If feasible, arrangements should be made for a personal interview.

Previous academic work which has been satisfactorily completed in a program of study that reasonably parallels the curriculum of Dickinson College will be evaluated for credit. The course requirements for graduation (34 courses) normally will be reduced by nine for every academic year of full-time work at other accredited institutions. Part-time course work, summer study, and unusual circumstances will be evaluated on a proportional basis using the above formula.

Final determination of credit and the satisfaction of distribution and language requirements will be made by the Registrar. Among the academic regulations applicable to all students and of particular note to transfer applicants is the graduation requirement that at least 16 courses be taken on our campus, the last twelve of which must be taken while the student is matriculated with an approved major field of concentration.

## FINANCIAL ASSISTANCE FOR TRANSFERS

All transfer students who are accepted for admission are eligible for financial aid consideration in the form of grants, loans and/or jobs if financial need is demonstrated. The Parents' Confidential Statement of the College Scholarship Service must be submitted to determine the degree of financial need. Filing deadlines for this statement are November 15 for Spring Term admission and June 1 for Fall Term admission.

## READMISSION

Any formerly matriculated student who wishes to re-enroll must file an application for readmission. Such applications should be filed with the Registrar prior to April 15 for the fall semester, and prior to December 1 for the spring
semester. A student who was required to withdraw should consult page 151.
A student who is absent from the College at least three years, and who is readmitted and successfully completes the equivalent of at least two semesters of work on campus, may petition the College Committee on Academic Standards to have course credits toward graduation and cumulative grade averages based only on work accomplished after his/her second matriculation. "Successful completion" will mean the attainment of at least a 2.0 average, or a higher probationary average, as stipulated by the Committee.

## CONTINUING EDUCATION

Dickinson College's continuing education program provides a way for those who desire a liberal arts education to enroll in regular courses while meeting other personal or professional responsibilities. This approach to a college program may appeal to people who want to start college or to complete a college career that has been interrupted as well as to adults who are interested only in auditing specific courses for possible enrichment of their personal or professional objectives.

Admissions procedures are simplified for those who are exploring the possibility of continuing their education. Such persons may register for their first four courses under the conditional credit plan. This plan allows students to pay an audit fee for a course but assures them that the course can be converted to regular credit, should they decide to enter a degree program, by simply paying the additional stipend. Continuing education students who do decide to work toward a degree may apply for regular admission to the college but may continue their study at a pace which allows them to meet other responsibilities.

Inquiries regarding continuing education programs should be directed to: Office of Continuing Education
Old West, Dickinson College, Carlisle, PA 17013

## ALUMNI-ADMISSIONS PROGRAM

The Alumni-Admissions Program of Dickinson College is composed of a group of alumni who are interested in providing a service to the students, parents, and schools of their home areas. The Alumni Admissions Committees are most willing to provide accurate, up-to-date information about the College to all persons interested in learning more about the unique academic, social, and cultural programs available at Dickinson.

If you desire further and more specific information about the College please feel free to contact the Alumni-Admissions Committee representative living in your home area.

Denver, Colorado
Thomas DeMarino, Esq. ' 59
1200 East Tufts
Englewood, Colorado 80110
Hartford, Connecticut
Springfield, Massachusetts
Dr. John A. Bierly '66
123 Richmond Lane
West Hartford, Connecticut 06117
Washington, D.C.
James F. Jorden '63
10236 Lawyers Road
Vienna, Virginia 22180

## Central Florida

Mr. and Mrs. Lew Sibert, Jr. '72
9031 Hogans Bend
Lutz, Florida 33549

## Southern Florida

Mr. and Mrs. William Steckley '62 and '63
8129 S.S. 81st Court
Miami, Florida 33143
Atlanta, Georgia
John Colburn '74
841 Frederica Street, NE
Apartment 22
Atlanta, Georgia 30306
Chicago, Illinois
Mrs. Richard W. Knier '74
2220 Sherman Ave. G-1
Evanston, Illinois 60201
Baltimore, Maryland
Mrs. Ann Snead '72
The Marylander Apartments
3501 St. Paul Street Apt. 807
Baltimore, Maryland 21218
Boston, Massachusetts
Dr. Frederic Jacobs '62
336 Russett Road
Chestnut Hill, Massachusetts 02167

St. Louis, Missouri
Mrs. Judy L. Stone ' 73
5595-A Golf Ridge Drive
St. Louis, Missouri 63128
Central New Jersey
Mr. and Mrs. Mark Lehman '71 and '72
561 Bradford Avenue
Westfield, New Jersey 07090
Northern New Jersey
Mr. and Mrs. William Houpt ' 57 and '59
24 Blackburn Road
Summit, New Jersey 07901
Southern New Jersey
Samuel Asbell '66
36 Tanner Street
Haddonfield, New Jersey 08033
Long Island, New York
Mrs. Joseph Andrews '63
3852 New York Avenue
Seaford, New York 11783
New York City, New York
Esteban A. Ferrer ' 72
27 W. 71st Street
Apartment 3D
New York, New York 10023
Cleveland, Ohio
Stephen H. Hoffman ' 72
3559 Gridley Road
Shaker Heights, Ohio 44122
Philadelphia, Pennsylvania
Barbara F. Boyle '73
1802 Delancey Place
Philadelphia, Pennsylvania 19103
Pittsburgh, Pennsylvania
Mrs. Thomas M. Burns '70
700 Forbes Avenue
Apt. 1407
Pittsburgh, Pennsylvania 15219

## Wyoming

Mrs. Mary Beth Peden '71
2109 S. Jefferson Street
Casper, Wyoming 82601


## EXPENSES

The current operating cost of higher education is supported primarily by three areas of income: tuition and fees, endowment, and gifts from alumni, businesses, parents, and friends. The capital investment of the College, presently $\$ 25$ million, has come from contributions over the years from many sources. Dickinson College is conscious of the ever increasing cost of a college education and strives to maintain a quality education that is financially feasible.

All college bills are due and must be paid in full 10 days prior to class attendance for each semester. In the event full satisfaction of an account is not made by the due date, a late payment fee is applied to the account. Failure to settle the student's account by the start of classes will result in exclusion from college; and, no student can have an honorable dismissal or a certificate of advancement until all obligations have been met.

The trustees reserve the right at any time to amend or add to the regulations of the College, including those concerning fees and methods of payment, and to make such changes applicable to students presently enrolled, as well as to new students.

## COLLEGE FEE STRUCTURE

## The Comprehensive Fee Plan

Dickinson operates under the Comprehensive Fee Plan which includes tuition and fees-including support for the Holland Union and the athletic program. The Comprehensive Fee is applicable to all students enrolled in three or more courses per semester. Students enrolled in fewer than three courses will be billed on a course basis.

## The Resident Plan

The Resident Plan includes board, room, and health fee for services rendered through the College infirmary. All resident students are expected to participate in the full resident plan unless excused from any portion by the Office of Educational Services.

## Registration Fee

A registration fee will be charged prior to each semester to reserve enrollment in the college class and assignment of dormitory space. This fee of \$200 per semester is credited toward the semester charges. This fee is nonrefundable after the due date announced by the College if a student's registration is cancelled.

## Charges and Fees for Full-Time Resident Student 1976-77 School Year

All charges and fees are due 10 days prior to attendance of class each semester. Accounts not settled by the due date will be subject to a late payment fee.

> Per Year
> Comprehensive Fee-includes tuition and fee ....... \$3,510 Resident Fee-includes board, room, and Health Center 1,690
> Student Senate Fee (payable in full-Fall Semester) . . 50
> Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 5,250$
> On a per term basis the Comprehensive and Resident Fees are billed at one-half the per year charge.
> In addition to college charges it is estimated that the average expenditure per year for books and supplies is $\$ 170.00$.

## MISCELLANEOUS AND SPECIAL FEES

Per course tuition charge for part-time students . . . . . . . . . . . . . . . . . $\$ 585$
Per course tuition charge for part-time non-matriculated students . . . 410
Auditing, per course . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 205
Activities Fee per course . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 35
Practice Teaching . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 35
Automobile Registration . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
Graduation Fee . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20
Application Fee . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20
Transcript of Record (provides lifetime service) . . . . . . . . . . . . . . . . . . 15 payable once
Late Payment Fee . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20
Sickness Insurance—per year . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 28
Accident Insurance-per year . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 26
ROTC Cadet Activity Fee-per semester . . . . . . . . . . . . . . . . . . . . . . . . 10
Applied Music:
Full Semester-one hour lesson . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 180$
Full Semester-half hour lesson . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 90

## PLAN OF PAYMENTS

An itemized statement of charges is mailed approximately six weeks prior to the start of each semester. Since payment is expected in full prior to the start of classes, persons desiring a payment plan can elect participation in either the Girard Trust Edu-Check Plan, The Tuition Plan, or the Richard C. Knight Tuition Plan. Complete information on these plans may be secured from the College's Business Office. Those persons desiring to use one of the plans must complete the necessary details no later than two weeks prior to the due date for payment.

Students attending college under a provision with a State Board of Assistance or other outside agency must supply complete information to the Business Office.

## REFUND OF CHARGES

A student in good standing is entitled to honorable withdrawal at all times. The date on which the Dean of the College approves the student's withdrawal form is the official date of withdrawal. A student desiring to withdraw voluntarily from the College must obtain from the Registrar an application for withdrawal. This form must be properly completed and returned to the Registrar before the student leaves the campus. No refunds will be made by the Business Office until the Registrar's office certifies that the withdrawal procedure has been completed.

Every college has many expenses of a continuing nature. In order to plan and maintain these services over the entire year, it is essential that the annual
income from fees be assured. It is understood, therefore, that students are entered for the entire college year.

No refund is made for room charges. Pro-rated refunds on board charges are made only upon authorization by the Office of Educational Services.

If a student called away during the semester by an emergency finds it impossible to resume his work, he must notify the Registrar's Office of his voluntary withdrawal immediately. Unless notice is filed with the Registrar within three weeks, the student will forfeit his right to honorable withdrawal.

If the withdrawal occurs before the end of the semester, the student is obligated for the full sum of the activities portion of the Comprehensive Fee and for tuition as follows:

$$
\begin{array}{lr}
\text { Two weeks or less } & 20 \% \\
\text { Between two and three weeks } & 40 \% \\
\text { Between three and four weeks } & 60 \% \\
\text { Between four and five weeks } & 80 \% \\
\text { Over five weeks } & 100 \%
\end{array}
$$

No reduction will be allowed for absence of students withdrawn for unsatisfactory conduct or scholarship.

Note:
Faced with rising costs, the College has had to raise its fees in recent years, and further increases can be expected.

## FINANCIAL AID

Dickinson's student aid program seeks to provide financial assistance to those whose personal and family resources are inadequate to meet the full cost of a Dickinson education. A number of special loan and scholarship funds have been established over the years by alumni and friends of the College, from which awards are made on the basis of need and merit. Supplementing these funds, the College annually sets aside a portion of its operating budget for scholarships and student aid.

Since it is rarely possible to meet a student's need from a single source, the College usually combines grant-in-aid, loan and part-time employment to the extent of a student's eligibility. Eligibility is determined by analyzing the applicant's records and the Parents' Confidential Statement filed through the College Scholarship Service, Princeton, New Jersey. Parents of freshman applicants for financial aid should file the Parents' Confidential Statement no later than February 15. Parents of upperclassmen and returning students must file by February $\mathbf{1}$ each year.

All parents of successful aid applicants are asked to sign a waiver releasing
a certified copy of their latest federal income tax return directly from the Internal Revenue Service.

GRANTS-IN-AID represent gifts from Dickinson College scholarship funds.

NATIONAL DIRECT STUDENT LOANS are federally funded repayable loans. No special application is required beyond the Parents' Confidential Statement as need and family income determine eligibility. National Direct Student Loans are interest-free while the recipient completes his/her college and post-graduate education. During the ten-year repayment period, interest on the loan is charged at a rate of 3 per cent. A portion of the principal may be forgiven if the student becomes a teacher of the handicapped or a teacher in certain schools serving low-income families.

THE COLLEGE WORK-STUDY PROGRAM offers eligible students the opportunity for self-help through part-time employment. Usual campus employment requires 12 hours of work per week while classes are in session. 80 per cent of the College Work-Study Program is financed by federal sources.
REGULATIONS.-Financial assistance is normally awarded for the full academic year. The College reserves the right, however, to review individual cases at any time. Students who have received financial aid may count on its renewal, though not necessarily in the same amount or through the same program, subject to the following conditions: attainment of a satisfactory scholastic record, maintenance of a high standard of conduct, continued existence of financial need and exercise of strict economy. Second year students are sometimes asked to accept a larger loan than they had their first year. Resident students having the use of a motor vehicle must report details to the Financial Aid Office.

All students desiring renewal of financial aid must submit an Application for Financial Aid, and file annually a Parents' Confidential Statement through the College Scholarship Service, Princeton, New Jersey. The latter must be filed by February 1. Complete information concerning the scholarship and financial aid program, including all necessary forms, should be obtained from the Director of Student Aid prior to November 15.

Transfer students are eligible for financial aid.
Aid is limited to eight semesters of eligibility including summer school. Two sessions of summer school is defined as equal to one semester of eligibility.
A student who withdraws from College for academic reasons is not eligibile for any grant aid for the first semester of his/her return. If that student achieves his/her probationary average at the end of the first semester, then he/she is eligible for financial assistance the second semester.

Students who wish to establish their financial independence must submit proof of being self-supporting for at least one calendar year prior to their application.



## STUDENT LIFE

One of the primary objectives of the educational program at Dickinson College is to help students develop the capacity to make wise decisions and to use freedom of action with the sense of responsibility which should characterize mature citizens in a democratic society. The College values its residential character and small size. They permit and encourage efforts to unite experiences inside and outside of the classroom in support of the full development of each student.

Dickinson has moved in recent years to give students greater latitude for the management of their own affairs. Self-governance is a characteristic of residence hall life. Students are full members of the College committees which affect all aspects of life at Dickinson and which make visible our commitment to creation of a learning community.

The Educational Services staff is responsible for coordinating various student support functions and for working with individuals and groups of students to assist them in making the most of the opportunities for growth that exist at the College.

## STUDENT SUPPORT SERVICES

## ADVISING AND COUNSELING

Every student at Dickinson is assigned a member of the faculty who acts as his/her adviser. The adviser helps to plan student programs for each semester and advises on choice of major and plans for future study and vocation. Faculty advisers to freshmen are assigned to groups of students who live in the same area of a residence hall. This allows the adviser to become familiar with the total life of the student and to assess the impact of non-academic activities upon the student's academic performance. Freshman faculty advisers work closely with upper class resident advisers who live in freshman halls.

A few days before the beginning of the fall semester, new students participate in an orientation program designed to acquaint them with both the academic and non-academic aspects of life at Dickinson.

The Counseling Center staff, which consists of three college counselors, is available to all students for a variety of developmental concerns including educational-vocational decisions, psychological problems, development of individual goals, and choice of major. The staff makes a particular effort to initiate career orientation programs.

Also available for counseling are the Dean of Educational Services, the Associate Deans, the College Chaplain and the Assistant Chaplain.

## FOOD SERVICE

All resident students are expected to participate in the College's Board Plan, the cost of which is included in the Resident Fee. The Food Service Department will provide for special dietary problems, when the existence of such problems is documented. The Food Service often presents special "theme" meals. All boarding students eat together in the dining room in the Holland Union.

## HEALTH SERVICE

The College provides a Health Center staffed by practicing physicians retained by the College and registered nurses who provide care for minor illnesses. The Carlisle Hospital is close by for emergency treatment and major illness. At present college students also have access to the services of a consulting psychiatrist and a consulting gynecologist.

In the event of prolonged illness, the student and his parents or guardian must make arrangements for medical service and care. College fees do not

cover such cases, nor do fees provide for specialists, laboratory tests, X-rays, allergy or immunization treatment.

The College requires that students avail themselves of an accident insurance policy, arranged through the Insurance Company of North America, to provide care beyond that provided by the Health Center unless the student is already amply covered by insurance and the parents and student sign a statement to this effect.

## PLACEMENT

The Placement Bureau, which is part of the Counseling Center, aids seniors and alumni in solving employment problems and further assists undergraduates in seeking part-time or summer work during their college years. Vocational guidance materials and career information are available in the Counseling Center. Placement of teachers is coordinated through the Department of Psychology and Education. A Placement Library is also maintained.


## RELIGIOUS LIFE

From its founding, Dickinson College has subscribed to the belief that the worship of God and the study of religion are integral to liberal education. In response to a heritage that recognizes freedom of worship, no student is ever denied admission to the College because of sect or creed. In addition to its courses in the Department of Religion, the College invites student participation in voluntary worship services on campus. An ecumenical Christian service is conducted on campus each Sunday by the Chaplains and guest ministers. In addition to this worship opportunity, Jewish Services are conducted each Friday evening at 7:00 p.m. and each Saturday morning at 9:30 a.m.; Roman Catholic Mass is celebrated each Sunday at 6:15 p.m.; and there are special services for the Jewish High Holy Days and for Christian feasts and festivals.

In addition, the College enjoys a fine spirit of cooperation with the churches in the Carlisle community. On campus, various denominational and religious fellowships are coordinated through the Office of the Chaplain and appropriate student-faculty committees. Action-in-Society is the major student fellowship which serves the campus and community through various social service programs such as PEER, tutoring, work with mentally handicapped persons, and Big Brother/Sister guidance projects. Dickinson College has a nationally recognized Hillel Council.

## RESIDENCE HALLS

Dickinson is a residential college. This means that the program of the

College is conducted on the assumption that an important element in education is an interchange of ideas outside the classroom, which is facilitated by the association of students living together in residence halls. By utilizing a variety of physical arrangements, the College attempts to enhance a student's educational environment and his sense of community without hindering his individual choice of life style.

In recent years, the College has instituted several sections of academically related housing, such as language dormitories.

Any student who is not officially accepted as a commuting or married student is required to reside in a College hall for each of his four years. All resident freshmen are assigned spaces by the Associate Dean for Residential Services on the basis of a questionnaire completed before matriculation. Other students choose their rooms in an order determined by lot. All men who are affiliated with the ten national fraternities having chapters on the Dickinson campus must reside in the college-owned residences assigned to their respective fraternities. Special authorization must be obtained from the Office of Student Services to live off campus.

In accordance with faculty legislation, each residence hall establishes its own regulations affecting the conduct of residents and guests including such matters as curfews and parietal hours. These regulatory codes are developed by residents of the living unit and approved by the Associate Dean for Residential Services.

## Residence Halls for Women

Residences for women range in capacity from 8 to 195 students. Freshman women live in Drayer, Morgan, Malcolm, Adams and Witwer Halls. Each of these residences has a Senior Resident Adviser and a staff of Resident Advisers available for counseling and advising students.

Upperclass women live in Malcolm, Adams, Drayer and Witwer Halls, and several of the smaller campus residences. Upperclass women are provided with keys to their residence halls.

## Residence Halls For Men

Residences for men range in capacity from 46 to 195. Freshman men live in Morgan and Adams Halls and are assigned an upperclass Resident Adviser. These are carefully selected sophomore, junior and senior men who are available for advising new students. Upperclass fraternity men and a number of independent men reside in College-owned residence halls assigned to each of the ten national chapters.

## Residence Halls For Men and Women (Coed)

Adams, Kisner-Woodward, and McKenney Halls are residences for men and women who reside on alternate floors or in separate suites. The buildings range in size from 77 to 172 students.


## STUDENT ACTIVITIES

## STUDENT GOVERNMENT

The principal legislative body of Dickinson students is the Student Senate. The Senate manages $\$ 80,000$ designated for student activities, elects students to serve on the judicial bodies of the College and on All-College committees, and makes recommendations on matters affecting the student body to the appropriate faculty or administrative agencies.

## ATHLETICS

Dickinson supports intercollegiate competition for men in football, soccer, cross-country, basketball, swimming, baseball, track, tennis, golf and lacrosse. Dickinson women participate in intercollegiate tennis, basketball, swimming field hockey, volley ball, and lacrosse.

Contests are scheduled with colleges which have similar athletic and academic policies. Student athletes are eligible for scholarships and grants-in-aid on the same terms as other students.

There is an extensive intramural sports program which includes activities for men, women and coeducational groups. Competition is offered in basketball, touch football, field hockey, volleyball, softball, bowling, swimming, golf, squash, archery, badminton, tennis, table tennis, lacrosse, pool, skiing and marksmanship.

## DEBATE

The Debate Council participates in an extensive program of intercollegiate
debating. All students are eligible for membership; those students with good scholastic averages are eligible to travel with the squad to tournaments scheduled with other colleges throughout the East and South.

## DRAMATICS

The Mermaid Players, Dickinson's drama organization, presents four major productions each year. Other activities of the group include several "laboratory" plays and a series of one-act freshman plays. Opportunities for participation are unlimited, for there is much work to be done with scenery, makeup, coaching, and costumes.

## FRATERNITIES AND SORORITIES

Approximately 45 percent of the Dickinson men belong to the ten national fraternities which have chapters at Dickinson College-Alpha Chi Rho, Beta Theta Pi, Kappa Sigma, Phi Epsilon Pi, Phi Delta Theta, Phi Kappa Psi, Phi Kappa Sigma, Sigma Alpha Epsilon, Sigma Chi, and Theta Chi.

One national sorority has a chapter at Dickinson-Pi Beta Phi. There are two local sororities-Alpha Delta Epsilon and Delta Nu. Approximately thirty percent of the Dickinson women are affiliated with sororities.


## MUSIC

Dickinson offers students varied opportunities to participate in vocal and instrumental musical organizations. The College-Community Orchestra is open to students and musicians from the surrounding area; the College Choir presents two major concerts each year; the Chapel Choir is composed of about thirty voices; and the Collegium Musicum is a small, select group of experienced singers and instrumentalists chosen from the student body and faculty.

## PUBLICATIONS

In addition to the Catalogue, the College publishes two periodicals: Dickinson Today and the Dickinson Alumnus.

Student publications include the college newspaper, The Dickinsonian; the Microcosm, Dickinson's yearbook; The Mermaid's Tale, an information annual for old as well as new students; and The Belles Lettres Review, a literary magazine.

## RADIO

WDCV-FM, the College radio station, is supported entirely by student efforts. Programming is consistent with regulations for non-commercial stations as outlined by the FCC.

## SOCIETIES

The Pennsylvania Alpha chapter of Phi Beta Kappa was established at Dickinson College April 13, 1887. Election to membership is the highest academic honor available to a Dickinson student, and only those who rank among the top 10 percent of their class are eligible.

Other honorary societies are as follows: Tau Kappa Alpha, debating and oratory; Pi Delta Epsilon, journalism; Alpha Psi Omega, drama; Pi Gamma Mu, social science; Phi Mu Alpha Sinfonia, music; Delta Phi Alpha, German; Pi Delta Phi, French; Sigma Delta Pi, Spanish; Eta Sigma Phi, Classics; Psi Chi, Psychology.

Omicron Delta Kappa, established at Dickinson in 1927, is a national leadership society for seniors of outstanding ability. Wheel and Chain is a leadership society for senior women. Raven's Claw and Skull and Key are campus social recognition societies.

## JUDICIAL SYSTEM

Dickinson subscribes to the principles of the Joint Statement on Rights and

Freedoms of Students developed by the National Student Association, the American Association of University Professors, the National Association of Student Personnel Administrators, the National Association of Women Deans and Counselors, and the Association of American Colleges. In line with these principles, Dickinson seeks to regulate student conduct only in areas which have persuasive relevance to the College's function as an academic institution.

## The Academic Violations Hearings Board

The Academic Violations Hearings Board may hear all cases involving allegations that a student has violated a policy which governs the academic program of the College. The Board is composed of the Associate Dean of the College, three members of the faculty, the Vice President of the Student Senate, and two students elected by the Student Senate.

## The Social Violations Hearings Board

The Social Violations Hearings Board may hear all cases involving allegations of misconduct except allegations that a student has violated a policy which governs the academic program of the College. It also hears appeals from persons on whom a penalty has been imposed by the judicial body of a residence hall. The Social Violations Hearings Board consists of two faculty members, one administrator, the Vice-President of the Student Senate, and three students elected by the Student Senate.

## The Student Academic Grievance Board

The Student Academic Grievance Board may hear allegations of Faculty actions which constitute violations of the "Guidelines on Faculty Conduct." The Board consists of the Dean of Educational Services, the VicePresident of the Student Senate, two members of the Faculty elected by the Faculty, and one student elected by the Student Senate.

## AUTOMOBILES

Freshmen are not permitted to maintain automobiles at Dickinson or in Carlisle and its environs. Upperclass students may maintain automobiles when they are registered with the Security Office.


#### Abstract

ANIMALS Animals are not permitted in College buildings or on College property. The only exception are animals kept in laboratory buildings where they are used for scientific purposes authorized by members of the Faculty or Seeing Eye Dogs.




## THE CAMPUS

The physical plant of the College consists of more than 50 buildings on 48 acres of land near the center of Carlisle, a pleasant community of 20,000 . Additionally, the College has a recreation area of 65 acres and other properties apart from the main campus.

While many of the buildings are of Georgian design, a number reflect a more contemporary style. The use of native limestone in most buildings provides continuity throughout the campus.

The John Dickinson Campus is the site of four major buildings framed by a low limestone wall erected in 1833. Other buildings are grouped around this campus, many being located on the Benjamin Rush Campus or other properties west of College Street. The President's house was built in 1833 and has been the residence of the presidents of the College since 1890.

The Charles Nisbet Campus, bringing together the Anita Tuvin Schlechter Auditorium complex, the Boyd Lee Spahr Library and 14 residences, is the newest segment of the campus. Fifteen of the eighteen buildings on seventeen acre Nisbet campus have been constructed in the last decade.

The physical plant is estimated to have a value of more than $\$ 24$ million.

## COLLEGE BUILDINGS

## Academic and Administrative

WEST COLLEGE, 1804. Administrative and faculty offices; Inter-Faith Chapel; Memorial Hall, McCauley Room, classrooms, Department of Economics.

THE BOYD LEE SPAHR LIBRARY, 1967. 250,000 volumes. 1,200 periodicals.

The library is the core of the liberal arts community and is designed to support scholarly research, independent study, and all regular academic programs of the College. Resources include printed materials in every form, recordings, microfilm, photographs and manuscripts.

The library provides seating for 800 readers, including closed carrels for faculty use and honors carrels for assignment to students pursuing independent studies. Open-stack areas are concentrated on the upper and lower levels. Reference and audio-visual areas are located on the main floor. The Alexander A. Sharp Room near the main entrance offers an opportunity for relaxation in an attractive setting. On the upper level, the Alvah A. Wallace Lounge commands a broad view of the Benjamin Rush Campus and the May Morris Room houses Dickinson's special collections.

The library is a United States Government Depository, a member of the Union Library Catalogue of Philadelphia Metropolitan Area, and a member of the Area College Library Cooperative Program of Central Pennsylvania.

When the College is in session, the library is open from 8:00 a.m. to midnight, Monday through Thursday; 8:00 a.m. to 10:00 p.m. on Friday; 10:00 a.m. to 10:00 p.m. Saturday, and 1:00 p.m. to midnight on Sunday. A latenight study area is provided for student use.

THE BERNARD CENTER FOR THE HUMANITIES, 1970. Named in honor of B. A. and Rebecca S. Bernard, the Center is housed in the restored East College, built originally in 1836. Departments of English, Classical Languages, Philosophy and Religion. Classrooms, departmental libraries, seminar rooms, faculty offices.

ALTHOUSE SCIENCE HALL, 1958. Named in honor of C. Scott Althouse. Departments of Chemistry and Geology. Lecture halls, laboratories, scientific library, museum, Bonisteel-Yeagley Multiple Telescope Observatory, research offices.

TOME SCIENTIFIC BUILDING, 1883. Renovated 1958. Department of Physics and Astronomy. Lecture halls, laboratories, Roscoe O. Bonisteel Planetarium, research offices.

DANA BIOLOGY BUILDING, 1966. Named in honor of Charles A. Dana. Department of Biology. Lecture halls, laboratories, departmental library, research offices, greenhouse.

REED HALL. Renovated 1958. Department of Psychology and Education. Classrooms, laboratories, offices.

DENNY HALL, 1905. Renovated 1965. Departments of Military Science, History, Political Science, and Sociology and Anthropology. Classrooms, offices, anthropology museum.

SOUTH COLLEGE, 1948. Renovated 1970. Department of Mathematics. College Computer Center, classrooms, offices.

BOSLER HALL, 1884. Renovated 1969. Departments of Fine Arts, Modern Languages and Music. Language laboratory, electronic learning center, classrooms, seminar rooms, offices.

## Student Life

HOLLAND UNION BUILDING, 1964. Named in honor of Homer C. Holland. College dining room, Mathers Theatre, snack bar, social hall, meeting rooms, offices, radio station, game room, college store, campus publications center, television lounge, campus post office, campus security office, Counseling Center and Office of Student Services.

HEALTH CENTER. Located on the ground floor of Drayer Hall. Completely equipped dispensary and infirmary.

ANITA TUVIN SCHLECHTER AUDITORIUM, 1971. Named in honor of the daughter of Louis A. Tuvin, principal donor. This facility is equipped for three separate performances or as a theater in the round. It contains the latest in audio and lighting features.

## Athletic Facilities

HERMAN BOSLER BIDDLE MEMORIAL ATHLETIC FIELD. Intercollegiate athletics. 12 acres. Football field, tartan track, tennis courts, lacrosse field, baseball diamond, permanent stands, press box, field house, and storage facilities.

ALUMNI GYMNASIUM, 1929. Department of Physical Education. Main floor for intercollegiate basketball and indoor intramural programs. Swimming pool and offices. Squash courts adjacent.

SPORTS AND RECREATION AREA. 65 acres located two miles east of the campus along Route 11. Natural life study area, golf driving range, intramural sports area.



## Auxiliary Facilities

FLORENCE JONES REINEMAN WILDLIFE SANCTUARY. Faculty and students at Dickinson College are privileged to enjoy the use of the 3,300-acre wildlife sanctuary for teaching and study. The sanctuary is administered by the college under an agreement with the Girard Bank and J. Welles Henderson, Esq., trustees of the estate of Mrs. Florence W. Erdman of Philadelphia, who provided funds for its creation and operation in memory of her mother.

The sanctuary lies on the north flank of Blue Mountain, the first ridge at the edge of the Folded Appalachians, about 7 miles northwest of Carlisle, in a sparsely populated area of Perry County known as Green Valley. It is easily accessible via State Route 74 through Waggoner's Gap. Facilities at the sanctuary include a field station with laboratory, resident manager's house, and limited dormitory space. In accordance with the terms of the will of Mrs. Erdman, the sanctuary may be utilized by students, researchers, and qualified naturalists, under authorized supervision, ". . . to enlighten and educate the public so as to develop their interest in preserving wildlife for future generations."

Since 1957, the sanctuary vegetation has been undisturbed. No hunting, trapping, fishing, or recreational uses are permitted. Most of the area is developing into a climax forest of oak, hemlock, maple, and birch. Some 100 acres of fields and old pastures provide habitat variety. The sanctuary is on the migration route of numerous hawks and eagles. During the fall, Waggoner's Gap is a popular site for hawk watchers from throughout the East. With northwest winds, as many as 1,500 hawks can be seen passing along the ridge in a single day. Birds, reptiles, and small animals are abundant, and small herds of deer are found throughout the sanctuary.

Active research involving close cooperation by students and faculty is an integral part of the sanctuary's program. It involves such diverse aspects of the sanctuary as trees, deer, birds, algae, sedimentation, and streamflow. There are numerous streams, all of which are unpolluted, and two small ponds, harboring diverse aquatic communities. The geologic setting of the sanctuary is a syncline, containing a youthful drainage network.

As might be expected, the sanctuary is used primarily by the Departments of Biology and Geology, which jointly participate in its management. Biology students and faculty find unusual opportunities for the study of a variety of animals and plant communities. Those interested in geology find the Green Valley drainage basin provides excellent opportunities to observe the dynamics of geologic processes in an undisturbed setting.

## Residence Halls (40 or more residents)

FRATERNITY RESIDENCE HALLS, 1964. Ten residences providing living accommodations for members of Dickinson's ten national fraternities. 46 men each.

DRAYER HALL, 1951. Named in honor of Mr. and Mrs. S. M. Drayer. 149 women.

ADAMS HALL, 1963. Named in honor of Dr. and Mrs. Rolland L. Adams. 172 men and women.

MORGAN HALL, 1955. Named in memory of James Henry Morgan. 195 men and women.

MALCOLM HALL, 1966. Named in memory of Gilbert Malcolm. 77 women.

WITWER HALL, 1966. Named for the Witwer family. 77 women.
KISNER-WOODWARD HALL, 1969. Named for Helen Kisner and Hugh B. Woodward. 92 men and women.

McKENNEY HALL, 1973. Named in honor of the McKenney family. 96 men and women in suites of eight.

## Residence Halls (fewer than 40 residents)

Biddle, 21 women; Mathews, 16 women; Montgomery, 28 men and women; Strayer, 17 men and women; and Todd Hall, 23 men and women.


## ACADEMIC PROGRAM

## SUMMARY STATEMENT

Dickinson College offers the degree of Bachelor of Arts and the degree of Bachelor of Science. The Bachelor of Arts is available to all students; the Bachelor of Science can be earned only by students who major in biology, chemistry, physics, geology, and mathematics. Students who elect the Selfdeveloped Major Program will receive the degree appropriate to their fields of study.

The selection of a program will depend upon the student's interests and vocational plans. Programs in engineering, premedical study, physics, and chemistry, for example, are the usual preparation for professional work in these fields. Students planning careers in law, business, or government service find majors in the humanities or social sciences of great value.

The purpose of a liberal education, however, is not primarily to provide vocational instruction, even though it may provide the best foundation for one's future vocation. Its purpose is to help students fulfill their responsibilities as sensitive persons and grow into cultivated and versatile individuals. Liberal education is concerned with cultural heritage, the world of thought, and the development of the full dimension of human potentiality.

It is necessary for most students to concern themselves with the problem of making a living. But this concern should not lead to early or narrow specialization. Undergraduates still have need of broadening the scope of human experience. Particular skills may afford access to routine employment, but positions of greater responsibility will be occupied by those who are equipped to think their way through new problems and to conceive of their functions in a larger context of time and space. Liberal education and vocational training are likely to be the joint products of a common process, and the courses offered here should be selected with this larger perspective in mind.

Normally, students during the first half of their college program satisfy some, if not all, of the distribution requirements, choose their major field, and prepare for advanced work in these fields by taking the necessary prerequissites. A normal program consists of 3 to $51 / 2$ courses each semester which the student plans in consultation with his or her faculty adviser. Special advisers are available for preprofessional programs such as law, medicine, theology, education and engineering.

In addition to the normal course offerings Dickinson offers a rich program of independent study and research. A large part of a student's education can be spent in specially designed programs of self-initiated study. Students can also take some of their course work at a Consortium college: Franklin and Marshall, Gettysburg, or Wilson.

Finally, the College encourages study abroad both through its own summer and year-round programs and through cooperative efforts with other selected programs such as that of the Institute of European Studies.

## GRADUATION REQUIREMENTS

A student must pass thirty-four courses with a cumulative average of 2.00 and meet the applicable General, Distribution, and Concentration requirements. Responsibility rests with the student for the election of such courses as will satisfy the requirements of the College for graduation. A student must successfully complete a minimum of sixteen courses on campus, the last twelve of which must be taken while the student is matriculated with an approved major field of concentration. In addition, at least six of the last eight or the last four courses immediately preceding graduation must be taken on campus. To be considered "on campus," a student must be registered for a numbered course at Dickinson and must be physically on the Dickinson
campus for this course work. Students participating in the Binary Engineering Program or the Asian Studies program are also considered to be "on campus" for purposes of this requirement. All petitions seeking alteration of the residence requirement should be submitted to the Subcommittee on Off-Campus Study.

Any student desiring to participate in more than two semesters of study off campus, or participate in more than one off-campus program, or be off campus for more than two courses during the second semester of his senior year, must obtain the approval of the Subcommittee on Off-Campus Study. Approval will be based on demonstrated relevance and coherence in the student's overall educational Program. Students participating in the Binary Engineering Program or the Asian Studies Program need not obtain special approval.

## LANGUAGES

A candidate for a degree is required to complete work in a foreign language, classical or modern, through the intermediate level. A degree candidate whose native tongue is not English may be relieved of this requirement by the Dean of the College who shall notify the student of the fact in writing and send a copy of the notification to the Registrar and to the student's adviser.

Any student entering a course in a foreign language which he or she has studied for two or more years in a secondary school must take the appropriate College Entrance Examination Board Achievement Test. The student will be placed in the appropriate college course on the basis of the score achieved on this examination. The student may be excused from the language requirement on the basis of a sufficiently high placement score, with the permission of the appropriate language department.

Students beginning a language at Dickinson must complete the 102 or 104 level course before receiving credit for the 101 course.

A student who is qualified by placement for enrollment at any given level, but who is unable to work effectively at that level, may (at any time within the first thirty calendar days of the semester) with the concurrence of his or her instructor and adviser drop back one level without penalty.

Students who have fulfilled the language requirement may then receive credit for a single semester of the elementary level of another language only by registering for that course as an independent study with the instructor.

## PHYSICAL EDUCATION

Satisfactory completion of three semesters (six units) of physical education is required. Transfer students with junior standing with no physical education credit need to take only two semesters (four units) of physical education. This requirement may also be met by one year of active military service. Six months of active military service may be counted in satisfaction of two of the three semesters of physical education.

Every student who has not completed the physical education requirement must register for physical education unless excused in writing by the Dean of the College. Students are expected to have completed the physical education requirement by the end of the first semester of their senior year.

## DISTRIBUTION

The fundamental presupposition of the distribution requirements is that every liberally educated person should engage in some systematic inquiry within each of the three major divisions of learning-humanities, social sciences, and natural sciences-and some comparative study of another culture. (Elementary and intermediate foreign language courses and such other courses as may be designated by the department concerned cannot be used or counted toward fulfillment of distribution requirements.)

DIVISION I-Humanities-one course from each of the following three groups:

1. One course in Philosophy or Religion; or Humanities 101; or Environmental Studies 111.
2. One literature course in Classical Studies, English, French, German, Italian, Russian, Spanish; or Humanities 101.
3. One course from the following: History of Art, History or Theory of Music, Dramatic Arts 302, or Film 201.

DIVISION II-Social Sciences-three courses. Any three courses (unless otherwise noted) from the Departments of Economics, History (or Classical History), Political Science, Psychology and Education, Sociology-Anthropology, with the condition that no more than one course in the same discipline may be counted toward fulfilling the requirement.

DIVISION III-Natural Sciences and Mathematics. Three courses, from two departments or areas, including a two-semester laboratory sequence and one additional course, from the following: Biology, Chemistry, Contemporary Science, Environmental Science, Geology, History of Science, Mathematics, Physics/Astronomy.

COMPARATIVE CIVILIZATIONS-one course in the comparative study of civilizations selected from the following list (Except for Comparative Civilizations 102, 105, and 490, this course may also be counted as one of the courses required under a Division).*

Comparative Civilizations
102, 105, 490
English 215, 310
Fine Arts 209
History 119, 120, 253, 315**
Philosophy 244

Political Science 348
Religion 100, 120, 130, 201, 202, 220
Science 258
Sociology-Anthropology 230, 241,
242, 250, 307, 350, 365, 275

## CONCENTRATION

The fields of concentration consist of a required major in one or more discipline(s) (e.g. Biology, French, American Studies, etc.)*** and an optional minor. The required major consists of nine or ten courses of academic work in the discipline(s). In addition to these courses the department may, with the concurrence of the Committee on Academic Program, prescribe additional courses in related fields. The optional minor usually consists of five or six courses of academic work in the discipline (as specified by the department). If a student completes a minor in one or more fields of concentration, this fact will be noted on the permanent record.

The major field of concentration will normally be chosen during the student's sophomore year, but application to a department for acceptance as a major may be made any time in the first two years. Acceptance of a student as a major is determined by the department concerned on the basis of stated criteria. The department then assigns the accepted student to an adviser, using the student's stated preference as one of the bases for assignment. A student who is not accepted for a major field of concentration during the semester in which the twenty-second course will be completed will be required to withdraw from the College.

If a student intends to major in more than one department approval must be secured from each department. The program shall then be developed in consultation with both departments and must be approved by both, and the student will therefore be advised jointly by a member from each department. The same course may be counted for more than one major except for courses under the Self-Developed Major Program.

Should a student wish at any time to change a major, he or she must be accepted by the new department in accordance with normal procedures for declaring a major.

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THE CURRICULUM

Bold Face type indicates that a Major is offered in this field.

AMERICAN STUDIES
ANTHROPOLOGY (see SOCIOLOGY-ANTHROPOLOGY)
ASTRONOMY (see PHYSICS and ASTRONOMY).
BIOLOGY
CHEMISTRY

CLASSICAL STUDIES
COMPARATIVE CIVILIZATIONS
COMPUTER SCIENCE
DRAMATIC ARTS (see also THEATRE and DRAMATIC LITERATURE)
ECONOMICS
EDUCATION (see PSYCHOLOGY and EDUCATION)
ENGLISH
ENVIRONMENTAL STUDIES
FILM
FINE ARTS
FRENCH
GEOLOGY
GERMAN and RUSSIAN
GREEK (see CLASSICAL STUDIES)
HEBREW (see CLASSICAL STUDIES)
HISTORY
HUMANITIES
INDEPENDENT STUDY and RESEARCH (see SPECIAL PROGRAMS OF STUDY)
INTERDISCIPLINARY STUDIES
INTERNATIONAL STUDIES
INTERNSHIP PROGRAMS (see SPECIAL OPTIONS OF STUDY)
ITALIAN (see SPANISH and ITALIAN)
JUDIAC STUDIES
LATIN (see CLASSICAL STUDIES)
LATIN AMERICAN STUDIES (see SPECIAL PROGRAMS OF STUDY)
LIBRARY RESOURCES
MATHEMATICS
MILITARY SCIENCE
MUSIC

## PHILOSOPHY

PHYSICAL EDUCATION
PHYSICS and ASTRONOMY
POLITICAL SCIENCE
PSYCHOLOGY and EDUCATION
PUBLIC SPEAKING

## RELIGION

RUSSIAN (see GERMAN and RUSSIAN)
RUSSIAN AND SOVIET AREA STUDIES
SCIENCE

## SOCIOLOGY-ANTHROPOLOGY

SPANISH and ITALIAN
STUDIES IN THEATRE and DRAMATIC LITERATURE


## COURSES OF STUDY

When two course numbers, followed by a single description, are separated by a comma either course may be taken without the other, although the two are normally taken together as a one year course.

When two course numbers, followed by a single description, are separated by a comma, and preceded by an asterisk, the first course may be taken without the second, although the two are normally taken together as a one year course. The first course, however, is a prerequisite for the second.

When two course numbers, followed by a single description, are separated by a hyphen, the work of the two semesters constitutes an integral, indivisible one year course. Students who pass the first semester receive a grade of " $S$." When the second semester is successfully completed, the grade is recorded and credit is given for both courses. Those students who fail the first semester receive " $F$ " and may not take the second semester course.

## AMERICAN STUDIES

## Assistant Professor Malmsheimer, Director

American Studies, an interdepartmental program offered in cooperation with eleven participating departments, is dedicated to the discovery, exploration and analysis of significant interrelationships and contrasts between America and other civilizations, the American past and present, and the diverse components that make up American culture. American Studies seeks to provide an innovative and intellectually coherent approach to the study of American culture which will allow students to gain a broad comprehension of the American experience, to think systematically about the nature of cultural analysis, and to analyze a topic of their choice from different disciplinary perspectives in course work and a senior essay.

The American Studies Program encourages majors to take advantage of the rich cultural resources of the region and to participate in the many off-campus programs sponsored by Dickinson, other colleges in the Consortium and by the American Studies Program. Each year the American Studies Program brings distinguished authorities on American culture to Dickinson for lectures and classroom visits and sponsors field trips to historical sites, museums, cultural events and regional meetings of the American Studies Association. Programs of special relevance to American Studies majors include the Harrisburg Urban Semester, the Washington Semester, Internship Programs Off-Campus, and approved "In Absentia" Programs, such as a junior semester of course work in American Studies at another institution either in the U.S. or abroad.
212. INTRODUCTION TO AMERICAN STUDIES: ASPECTS OF AMERICAN CULTURE An inter-disciplinary investigation of selected aspects of the American experience and of the basic strategies of analysis employed by scholars in American Studies. Through lectures, selected readings, discussions and field trips students become familiar with the ways in which art, literature, popular culture, science, technology, material artifacts, social roles and institutions have shaped the American experience and found expression in American culture.

## 490. RESEARCH SEMINAR IN AMERICAN STUDIES An integrative research colloquium culminating in a senior essay.Prerequisite: the major in American Studies.

491. SEMINAR IN AMERICAN STUDIES: SELECTED TOPICS Topics such as the following are chosen annually on the basis of student interest and the latest scholarship in the field of American Studies: The Female Experience; The Impact
of Puritanism Upon American Culture, Past and Present; America Through Foreign Eyes; America and the Expressions and Dilemmas of Romanticism; The American 1890's; The Twenties; Intellectual Women in American Culture; The Artist in American Society; Technology and American Culture. Prerequisite: Permission of the instructor.

MAJOR: ten courses including
Requirement I.
Core courses in American Studies 212, 490, 491.
Requirement II.
One period or survey course in both American literature and American history and one course from Sociology/Anthropology which emphasizes theories of culture and comparative cultural analysis or conceptions of social structure and sociological theory.
a. One semester course in American history chosen from the following: 281. 20th Century American History; 347. American Colonial History; 349. American Intellectual and Social History; 350. American Intellectual and Social History.
b. One semester course in American literature chosen from the following: 311. Major American Writers I; 312. Major American Writers II; 390. The American Novel.
c. One semester course in Sociology/Anthropology chosen from the following: 302. Social Stratification; 303. Personality and Social Change; 307. Comparative Cultures; 380 . Sociological Theory.

Requirement III.
Thematic concentration. At least four courses, with no more than two of these four to be taken in one department, chosen in close consultation with the Coordinator to illuminate a topic of the student's choice. Although each topic will dictate a different selection of courses, not all of which must have American emphasis, the American Studies Program has an approved list of American content courses offered by the following departments and programs: Dramatic Arts, Economics, English, Environmental Science, Environmental Studies, Film, Fine Arts, History, Music, Philosophy, Political Science, Psychology, Religion, Science, Sociology/Anthropology.
The following courses represent a partial listing of the many courses of special interest to American Studies majors offered at Dickinson.
Economics. 114. A Contemporary Economic Issue; 250. Market Structure; 347. Money and Banking.

English. 390. American Novel; 215. Survey of Afro-American Literature; 401. Seminar in American Literature.
Environmental Science. 131, 132. Environmental Science.
Environmental Studies. 111. Environment, Culture and Values.
Film. 201. History and Art of the Film.
Fine Arts. 304. American Art.
History. 282. Diplomatic; 289. Negro in America; 311. Studies in American History; 388. Civil War; 390. Seminar in American History.

Music, 301. Twentieth Century.
Philosophy. 243. American Philosophy.
Political Science. 230. The City; 341. American Political Thought; 356. Public
Opinion; 357. Political Parties; 358. Legislative Process; 359. American Presidency; 363. Black Experience.
Religion. 313. American Religious Culture: Special Perspectives; 315. Figures and Movements in American Religious Culture; 324. Christian Ethics.
Sociology/Anthropology. 224. Race; 324. Urban Problems.
The American Studies list will be updated each semester to include new course offerings. "Selected Topics" courses open to majors in other fields will be credited towards the American Studies major when they are judged pertinent to Requirement I and to each student's topic under Requirement III.

MINOR: American Studies 212, 491 and Requirement III.
NOTE: All courses credited towards the major must be taken for a letter grade unless they are not offered on this basis.

## ANTHROPOLOGY

## See Sociology-Anthropology

## ASTRONOMY

See Physics and Astronomy

## BIOLOGY

Professors Biebel*, Jeffries, Chairman, B. McDonald, and D. McDonald Associate Professor Lane<br>Assistant Professors Shay and Strang

The Department of Biology seeks to provide the liberal arts student with a broad view of the principles and functions of animal and plant life. General biology, or its equivalent, is required of all students intending to major or minor in biology.

Elective courses, more specialized, are designed to introduce major concepts and experimental methods. The aim in these courses is to provide suitable preparation for students who plan to attend graduate school, or the professional schools of medicine, dentistry, or allied fields, as well as for those who

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do not anticipate undertaking post-graduate education. A special effort is made to develop research interest in seminars and independent studies. Further information about independent study may be found under "Special Programs of Study."
105. BIOLOGICAL ASPECTS OF CONTEMPORARY PROBLEMS An introduction to the biological basis of contemporary problem areas, such as: human reproduction and population; pollution, drugs, medicine and food additives; food supply and pesticides. The natural and man-made limitations involved in these problems, and man's position and function in the biosphere, will be central to the discussions. This course will not be counted toward the fulfillment of a major or minor in biology. Three hours classroom.

111, 112. GENERAL BIOLOGY Lectures, discussions and laboratory observation and experiments, designed to provide the informed citizen with an understanding of the fundamental principles of biology and the methods used in exploring the structure and function of living systems. Three hours classroom, three hours laboratory a week.
213. CYTOLOGY An introduction to the structure and function of cells. Laboratory work will include microtechnique of various types, such as sectioning and staining of tissues, radioautography, and photomicrography. Two hours classroom and four hours laboratory a week. Prerequisite: 111, 112 and Chemistry 131, 132 or concurrent registration therein.
214. ECOLOGY An exploration of the functional relationships between the abiotic and biotic components of the natural environment. Emphasis is placed on the fundamental principles of ecology and several current research topics. A field ecology laboratory emphasizes an individualized development of the problemsoiving aspects of field studies. Two hours classroom and four hours laboratory a week. Prerequisite: 111, 112.
217. GENETICS Principles of heredity and their impact on population dynamics, evolution, and human society. Laboratory projects are designed to acquaint students with modern techniques of conducting genetic experiments with living organisms. The class meets six hours each week. Prerequisite: 111, 112.
218. EMBRYOLOGY The experimental approach to the study of animal development. Two hours classroom and four hours laboratory a week. Open to freshmen with permission of the instructor. Prerequisite: 111.
221. INVERTEBRATE ZOOLOGY Principles of structure, classification, evolution, ecology, physiology, and the development of invertebrates. Two hours classroom and four hours laboratory a week. Prerequisite: 111, 112.
222. FIELD STUDY OF PLANTS A systematic survey of the plant kingdom through the collection and study of living plants. Frequent field trips are conducted as weather permits. An herbarium of named plants is prepared. Emphasis will be placed on the diverse features of plants which permit effective study of fundamental biological problems. Two hours classroom and four hours laboratory a week. Prerequisite: 111, 112.
223. NON-VASCULAR PLANTS: STRUCTURE AND FUNCTION An integrated study of morphology and physiology of lower plants. Emphasis will be placed on developmental physiology of selected types in culture. Two hours classroom and four hours laboratory a week. Prerequisite: 111, 112.
225. VASCULAR PLANTS: STRUCTURE AND FUNCTION An integrated study of anatomy, morphology, and physiology of higher plants. Emphasis will be placed on growth and development and their control. Two hours classroom and four hours laboratory a week. Prerequisite: 111,112.
226. MICROBIOLOGY The taxonomy, physiology, and heredity of bacteria, molds, and viruses. Laboratory projects are designed to provide technical competence in handling micro-organisms. The class meets six hours each week. Open to freshmen with permission of the instructor. Prerequisite: 111.
231. MOLECULAR BIOLOGY A biochemical approach to the study of the molecules of the living cell and their interactions. Energy relationships, metabolic pathways, biosynthesis of enzymes and nucleic acids, and the genetic code will be covered in relationship to control of cellular activities. The biological properties of macromolecules will be discussed as relating to their chemical structure. Two hours classroom a week. Prerequisite: 111, Chemistry 251, 252, or permission of the instructor. One-half course. See also Biology 232.
232. MOLECULAR BIOLOGY LABORATORY An investigative laboratory utilizing biochemical techniques in the study of biological material. Four hours laboratory a week. Concurrent registration in 231 is required. One-half course.
233. PHYSIOLOGY A study of physiological mechanisms in the animal kingdom, stressing the structural and functional base of biological activities. Two hours classroom and four hours laboratory a week. Prerequisite: 111, 112.
234. VERTEBRATE ZOOLOGY Examination of vertebrate evolution, development, structure, and physiology by the comparative method. Two hours classroom and four hours laboratory a week. Open to freshmen with permission of the instructor. Prerequisite: 111 .
301. SPECIAL TOPICS An in-depth study of more specialized subject areas of biology. Topics, course structure, and instructor to be announced by pre-registration.
312. SEMINAR Reading, conference, writing, and oral presentation of reports. Recent subjects were: Viruses; Environmental Indicator Organisms. Prerequisite: Permission of the instructor. One-half course.


MAJOR: seven courses, including one of the following upper-level courses in botany: Biology 222, 223 or 225, and one of the following upper-level courses in zoology: Biology 218, 221, 233, or 234. In addition, Chemistry 131, 132, 251, 252; Math 121,122 or 141,142 ; and Physics 111,112 or 131, 132 are required. The seven biology courses required for the major may not include more than one course in independent study, unless the student has obtained advanced placement beyond Biology 111, 112. In that case, the seven courses required for the major may not include more than two courses in independent study or research. Of the seven biology courses required for the major, at least three must be upper division laboratory courses (exclusive of independent study-research) taken in residence at Dickinson.

MINOR: six courses. In addition, Chemistry 131, 132 are required.
NOTE: A student intending to receive certification from the Pennsylvania Department of Education at the time of graduation must include within his or her program a course in botany, a course in genetics and a course in ecology. As preparation for graduate work in biology, some familiarity with one or more of the following foreign languages is recommended: French, German or Russian.

## CHEMISTRY

Professors Benson and Roper*<br>Associate Professors Leyon, Schearer, Chairman and Sheeley Instructor Landis

The courses offered by the department are designed to meet the needs of students who are preparing for graduate work, teaching, industrial work and medicine. A course in general chemistry is offered for students who wish to acquire a background in chemistry but who do not plan a career in science. Students who plan to major in chemistry should have as strong a high school preparation in science, English, foreign language and mathematics as possible.

Dickinson College offers a program of study in chemistry that has been approved by the American Chemical Society; this program is designed for students who plan graduate work in chemistry (see Note following course descriptions).

* 103, 104. GENERAL CHEMISTRY First Semester: Some fundamental concepts of atomic structure, bonding, and states of matter. Nuclear chemistry, biological effects of radiation, nuclear power. Basic chemistry of air and water pollution. Effects of man's technology. Second Semester: Basic principles of organic chemistry and biochemistry. Applications in everyday life are stressed. A terminal non-laboratory course for students planning to major outside the sciences. Three hours classroom. This course will not satisfy the one year laboratory science distribution requirement. Either course will, however, count as the third required course in Division III. If students elect to take 131, 132 in addition to 103, 104, graduation credit will be dropped for 103, 104 due to similarity in course content.
*111, 112. GENERAL CHEMISTRY Similar to *103, 104 except that it includes two hours laboratory a week. This course sequence will not count toward major or minor requirements in Biology or Chemistry. Students who decide to pursue chemistry courses beyond the 100 level, after completion of 111 or 112, may with the approval of the department be allowed to enroll in 132. Students will not receive graduation credit for both 111 and 131, or 112 and any higher numbered chemistry course.
*131, 132. PRINCIPLES OF CHEMISTRY Atomic and molecular structure, chemical bonding, physical and chemical equilibria, the kinetics of chemical reactions, the periodic table, and introductory descriptive chemistry of the elements. The laboratory work consists of elementary quantitative and qualitative analysis. Three hours classroom and three hours laboratory a week.
*251, 252. ORGANIC CHEMISTRY The chemistry of carbon compounds. The various functional groups and their transformations are studied systematically. Basic reaction mechanisms and the formulation of synthetic schemes are emphasized. Laboratory work involves the preparation and analysis of organic compounds. Three hours classroom and four hours laboratory a week. Prerequisite: 132.


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*331, 332. PHYSICAL CHEMISTRY The fundamentals of chemical thermodynamics, kinetics, and quantum mechanics are introduced as a unifying basis for the discussion of chemical and phase equilibria, electrochemistry, reaction mechanisms, spectroscopy, and atomic and molecular structure. Three hours classroom a week. Prerequisite: 131, 132, Physics 111, 112 or 131, 132 and Mathematics 122 or 142.
*337, 338. EXPERIMENTAL PHYSICAL CHEMISTRY Quantitative experiments in calorimetry, chemical and phase equilibria, surface phenomena, chemical kinetics, electrochemistry, spectroscopy and molecular structure. Scientific report writing and the analysis of data are stressed. Four hours laboratory a week. Prerequisite: 331, 332 or concurrent registration therein. One-half course each semester.
353. ADVANCED ORGANIC LABORATORY METHODS Emphasis on modern instrumental methods of structure elucidation, utilizing current chemical literature. Two hours classroom and four hours laboratory a week. Prerequisite: 252.
362. ANALYTICAL CHEMISTRY Major classes of separation and quantitative methods used in modern chemical analysis. Underlying theory is stressed so the student can broadly understand methods he or she will use in his future work. Two hours classroom and four hours laboratory a week. Prerequisite: 332 or concurrent registration therein.
431. INORGANIC CHEMISTRY Atomic and molecular structure, principles of chemical bonding, the periodic table, transition metal chemistry and chemistry of selected elements. Three hours classroom a week. Prerequisite: 332 .
472. BIOCHEMISTRY Introduction to the chemistry of living systems, with emphasis on their molecular structures, chemical properties, metabolic pathways, and energetics. The chemical bases for biological phenomena are extensively examined. Three class hours per week. Prerequisites: Chemistry 252, Biology 111, 112.
490. ADVANCED TOPICS IN CHEMISTRY Topics may be drawn from areas such as heterocycles, natural products, medicinal chemistry, spectroscopy, statistical thermodynamics and catalysis. Three hours classroom per week. Prerequisite: Permission of the instructor.

MAJOR: ten courses, including 131, 132, 251, 252, 331, 332, 337, 338, and at least two courses from $353,362,431,472$ or 490 . The remaining course is an elective from the five listed, independent study or independent research. In addition, Physics 111, 112 or 131, 132 and Math 121, 122 or 141, 142 are required. (Geology 303, Geochemistry can be applied to the major.)

MINOR: six courses, including 131, 132.

NOTE: Any student desiring certification by the American Chemical Society for graduate work should satisfactorily complete: 131, 132, 251, 252, 331, 332, 337, $338,353,362$ and 431 ; one course of independent study or independent research with laboratory; and one course from 472, 490, advanced physics, or advanced mathematics. Additional requirements are mathematics through simple differential equations and the ability to read simple scientific German or Russian with the aid of a dictionary.

## CLASSICAL STUDIES

## Professor Lockhart* <br> Associate Professors Rosenbaum and Sider, Chairman Assistant Professor Fitts

The Department of Classical Studies tries to do some of the things accomplished by "reading Greats" at an English university college. Its goal is to acquaint any student with those Greek and Latin authors who stand in undiminished status against the rivals of two thousand years. Without neglecting social and economic forces or forgetting the fascination of the classical tradition, the department concentrates on a few great authors, whose texts have been the inspiration of every worthwhile European mind.

The need for teachers of Latin in high schools is acute and opportunities for teaching on the college level are great. Many students have chosen to major in classical languages as preparation for professional training, law school, theological seminary and even medical school.

Dickinson College is affiliated with the Intercollegiate Center for Classical Studies in Rome. Through its facilities Latin majors may spend a semester of either the junior or senior year studying classical life within sight of the monuments themselves. This program, administered through Stanford University, is open only to students with a B average. Scholarships are available, and full credit is given by the College for work taken at the Center. Majors are thus afforded a chance to study with some of the country's finest professors of ancient literature, history and archaeology.

Classical Archaeology is available through an arrangement with Wilson College.

Hebrew texts are studied through the Department of Classical Studies in recognition of their double role as significant sources of ancient life and as the spiritual component of the humanism for which Latin and Greek have provided the intellectual element.

## Classical History

251, 252. HELLENIC HISTORY First semester: a study of Minoan and Mycenean civilization, the Homeric problem and rise of the polis, the Persian Wars, and the development of Athenian democracy to 478 B.C. Second semester: Greek history from 478 to 323 B.C. Alternates with 253, 254. To be given in 1976-1977.
253, 254. ROMAN HISTORY First semester: a study of the Roman state from prehistoric times to the end of the Republic. Second semester: Roman history from the establishment of the Principate to the death of Justinian, 565 A.D. Alternates with $251,252$.

## Greek

101-102. FIRST-YEAR GREEK Drill on the fundamentals of Greek grammar and the study of vocabulary. Selected prose, such as Plato's Euthyphro and Crito, are read in the second semester. Please refer to Graduation Requirements (Languages).
211, 212. SECOND-YEAR GREEK First semester: an introduction to Homer's lliad. Second semester: the reading of selected Greek tragedies. Prerequisite: 101102 or the equivalent.
233. HERODOTUS A study of Herodotus as historian. Prerequisite: 211 or 212 with a grade of at least C. To be given in 1977-1978.
234. HOMER A study of the Odyssey, with comparative readings in Hesiodic epic. Prerequisite: 211 or 212 with at least C. To be given in 1977-1978.

391, 392. SEMINAR: GREEK DRAMA A study of the Greek theater, with special emphasis on tragedy and comedy as literary types. Given in alternate years. To be given in 1976-1977. Prerequisite: 233 or 234 or permission of the instructor.
393, 394. RESEARCH SEMINAR A reading, research, and conference course on selected areas of Greek literature. Given in alternate years. To be given 1977-1978. Prerequisite: 233 or 234 or permission of the instructor.
MAJOR: ten courses numbered 102 or above. Classical Studies 251 and 252 may be counted toward this requirement; Philosophy 391 may be substituted for either of these Classical Studies when the subject matter is Plato.
MINOR: six courses numbered 102 or above. Classical Studies 251 or 252 may be counted toward this requirement, but not both.

NOTE: It is recommended that majors elect Fine Arts 202.

## Hebrew

101-102. FIRST YEAR BIBLICAL HEBREW Fundamentals of Hebrew morphology and grammar. Second term includes readings from Biblical narrative texts. Please refer to Graduation Requirements (Languages).

211, 212. SECOND YEAR HEBREW Review of grammar, rapid reading of selected texts; Book of Amos in the second semester. Prerequisite: 101-102 or the equivalent.

## Latin

101-102. FIRST-YEAR LATIN Drill in the fundamentals of Latin grammar and vocabulary. Selected prose from the Roman Republic is read in the second semester. Please refer to Graduation Requirements (Languages).

111, 112. SECOND-YEAR LATIN Review of Latin syntax. Readings from Cicero in the first semester, Vergil's Aeneid in the second semester. Prerequisite: 101-102 or the equivalent.
233. ROMAN HISTORIANS Readings from Roman historians, with particular emphasis on Livy. Prerequisite: 111 or 112.
234. LATIN POETRY Horace, Odes and Epodes; Catullus; the Elegists; Ovid. Prerequisite: 111 or 112.
331. CICERO Essays and letters, with stress on intellectual life of the age of Cicero. Given every third year. To be given in 1978-1979. Prerequisite: 233 or 234.
332. VERGIL Aeneid VI-XII, studied in the light of ancient poetical theory and the epic tradition. Given every third year. To be given in 1978-1979. Prerequisite: 233 or 234.
341. CAESAR The Bellum Civile, with special stress on Caesar as prose stylist. The nature and purpose of the Commentaries as a literary type. Given every third year. To be given in 1977-1978. Prerequisite: 233 or 234.
342. LUCRETIUS The philosophy and poetry of the De Rerum Natura. Given every third year. To be given in 1977-1978. Prerequisite: 233 or 234.
351. JUVENAL The nature of rhetorical poetry. Careful reading of the Satires. Given every third year. To be given in 1976-1977. Prerequisite: 233 or 234.
352. TACITUS Readings in the Annals and shorter works. Tacitus as historian and historical source. Given every third year. To be given in 1976-1977. Prerequisite: 233 or 234.

391, 392. THE LATIN LANGUAGE First semester: introduction to historical grammar and syntax. Second semester: the syntax of Classical Latin. Given in alternate years. To be given in 1976-1977. Prerequisite: 233 or 234 or permission of the instructor.

393, 394. SEMINAR Readings and conferences in a special topic of Latin literature. Introduction to research in classical studies. Given in alternate years. Prerequisite: 233 or 234 or permission of the instructor.

MAJOR: ten courses numbered 111 or above, including 111, 112, 233, 234; or the equivalent of these courses. Classical Studies 253, 254 may be counted toward this requirement.

MINOR: six courses numbered 111 or above, including 111, 112, 233 or 234. Classical Studies 253 or 254 may be counted toward this requirement, but not both.

## COMPARATIVE CIVILIZATIONS

The Comparative Civilizations program is intended to orient liberal education, in some systematic manner, to the experience of mankind as a whole. Comparative civilization studies are concerned with the multiple problems of construction and living within major alternative civilizational designs and the light which the comparison of diverse civilizations can throw on our understanding both of our own traditions and of the ways in which civilizational phenomena of any kind arise from the experiences of human beings and give coherent shape to them.

The Comparative Civilizations program consists of all courses offered at Dickinson College that focus on either (a) comparison of civilizations or of their essential components or of the historical processes by which they have evolved or disintegrated or (b) encounters between particular civilizations or between a civilization and less complex societies, in either case provided that at least half of the time in the course is devoted to materials from outside of the traditions that have shaped the modern West or entered into its composition. See "Graduation Requirements" (Distribution) for other courses offered by the particular Department which also meet the criterion for the Comparative Civilizations program. In addition: the program itself offers three courses:
102. SELECTED PROBLEMS IN CIVILIZATIONAL ANALYSIS. Exploration of some problem of general human significance as it has been dealt with by two or more of the world's major civilizations.
105. NON-WESTERN CIVILIZATIONS. A sustained study of a particular nonWestern civilization: India, China, Japan, civilizations of the Near East, Africa, or ancient America. (In the fall of 1976: Japan; spring, 1977: China.)
490. ISSUES IN COMPARATIVE CIVILIZATIONAL STUDIES. A facultystudent seminar intended for the joint discussion of questions of method and substance arising in the comparative study of civilizations. Prerequisite: permission of the instructor(s). (Fall, 1976: Dualities in Human Experience.)

No major or minor is offered in the program. Interested students should explore the feasibility of a self-developed major, proposed in cooperation with the Committee on Comparative Civilizational Studies. The Committee sponsors informal multidisciplinary faculty-student seminar, with a different substantive topic each semester, on intellectual issues that need to be studied in cross-civilizational perspective. Students who wish to be invited are urged to contact members of the Committee.


## COMPUTER SCIENCE

111.COMPUTER SCIENCE. This course is designed to develop the ability to use the College's computing system as an aid in subsequent academic work. Computer programming fundamentals designed to provide basic understanding of control techniques for modern digital computers. Includes the basics of computers, program documentation, basic disk file concepts, the writing and use of functions and subprograms. Two hours lecture, three hours laboratory per week. Programming language is FORTRAN IV. One course.

## DRAMATIC ARTS

Professor Brubaker, Chairman<br>Assistant Professor Poole

101. ACTING An introduction to the principles and theories of acting combined with practical exercises. One hour of classroom and five hours of laboratory a week.
102. DIRECTING A laboratory course in directing. Two hours of classroom and three hours of laboratory a week. Prerequisite: 101.
103. STAGECRAFT AND SCENE DESIGN A study of play production emphasizing scene construction, rigging, painting, design, and lighting. Two hours classroom and three hours laboratory a week. Prerequisite: permission of the instructor.
104. HISTORY OF THE THEATRE A study of the forms of theatre from primitive ritual to modern times. Open only to Juniors or Seniors, or with permission of the instructor.
105. STUDIES IN THEATRE HISTORY Research and discussion in selected areas and problems. Specific topics announced each year. Prerequisite: junior or senior status or permission of the instructor. (Offered in alternate years.)

## ECONOMICS

Professor Houston<br>Associate Professor King, Chairman<br>Assistant Professor Duggan<br>Instructors Barone, C. Morgan and S. Morgan

The Department of Economics offers courses designed to facilitate an understanding of the structure and function of the United States economy and of other economic systems. Through the study of economic methodology, of various theories, and of empirical data the student should gain a knowledge of essential economic processes and should gain insight concerning important current issues and policy problems. A student majoring in the field may obtain a background for business or the prerequisites for graduate study in economics, business, law, and allied fields. Other students will find that courses in economics complement their studies in other areas, especially in history, political science, sociology, and mathematics.
114. A CONTEMPORARY ECONOMIC ISSUE A current economic topic which has important public policy implications is examined. The topic, to vary from time to time, will be announced prior to registration.
121. THE NATIONAL ECONOMY Introduction to the structure and functioning of the national economy; the theory of the determination of the level of national income and economic activity, including an examination of the monetary system. Within this framework, such economic problems as inflation, unemployment and poverty are studied, as well as international economic issues and problems of economic development. Current economic problems.
122. MARKET SYSTEMS Introduction to the description and analysis of price systems; the resolution of problems of social choice within price systems; the operation of competitive and monopolistic product and factor markets; proposals to alter markets via income redistribution, human resource development, regulation of monopolies, environmental controls, etc.; comparison of the operation of price systems with alternative methods of making social decisions. Current economic problems.
123. RADICAL POLITICAL ECONOMY A radical analysis of the operation of capitalism in America today, stressing the causes and consequences of wealth and poverty. Specific topics for discussion include the roles played in American society by racism, sexism, consumer and worker alienation, and neo-imperialism.
*229, 230. ACCOUNTING PRINCIPLES A course designed to give the student a general knowledge of accounting and of its use as a tool of management. Emphasis is placed upon the managerial approach to economic and financial analysis and upon interpretation after basic accounting techniques have been mastered. Fundamental problems of business finance, income tax, and automatic data-processing systems are considered in the second semester. These courses do not count toward distribution requirements.
235. BUSINESS ORGANIZATION AND FINANCE The forms of business enterprise compared in their legal status and economic importance; dominance of the corporate form of private enterprise; problems of administration and finance; investors' rights and state control.
250. INDUSTRIAL ORGANIZATION AND PUBLIC POLICY A study of the relationship between market structure and economic performance in U.S. industry, followed by an examination of alternative public policies designed either to complement or to alter this relationship in the public interest. Prerequisite: 122 or the equivalent.
253. ECONOMICS OF LABOR A study of market and institutional forces that shape the labor market. Topics include unemployment, differences in wages and salaries, alternative futures in the world of work, among others. The course focuses heavily on the job market for college graduates.
268. INTERMEDIATE MACROECONOMIC THEORY A study of national accounting with emphasis on consumption, investment, and government expenditure patterns. Analysis of theories of income determination and of growth at the aggregate level as well as an examination of production flows among industrial sectors. Prerequisite: 121 or the equivalent.
278. INTERMEDIATE MICROECONOMIC THEORY Theory of relative prices of commodities and productive services under perfect and imperfect competition. The role of prices in the allocation and distribution of resources and commodities. Economic behavior of individual economic units like consumers, firms, and resource owners.
344. PUBLIC FINANCE A survey of the public sector and of government finance. Trends and purposes in government income and expenditures; analysis of deficit
financing and taxation theory and practice. Emphasis on financial problems of state and local governments. Prerequisite: 121 or the equivalent.
347. MONEY AND BANKING A study of the role of money and credit in the United States economy. This includes an examination of the functions of money, the commercial banking system, the Federal Reserve System, and other domestic financial institutions. Various theories of money will be studied. The monetary and financial policies and practices of the Federal Reserve System and the United States Government will be analyzed and appraised. Prerequisite: 121 or the equivalent.
348. INTERNATIONAL ECONOMICS An introduction to the determinants of international trade patterns, the causes and consequences of public policies to control trade, the operation of the international monetary system, its effects on national economies, and the emerging role of the multinational corporation. Prerequisite: 121 and 122.
349. ECONOMIC DEVELOPMENT Theories of economic development in the context of third world poverty. Simple growth and planning models. Alternative development strategies and policies within the context of the social and political structures, historical legacy, and the current international political economy of underdeveloped countries. Prerequisite: 121 or equivalent.
*361, 362. INTERMEDIATE ACCOUNTING PRINCIPLES A more advanced treatment of the material in Economics 229, 230, with increased emphasis on advanced accounting theory and techniques in conjunction with the managerial approach. Consideration of advanced problems in business finance. Prerequisite: 230. These courses do not count toward distribution requirements.
371. TOPICS IN ECONOMIC HISTORY Focusing on North America and Western Europe since the Industrial Revolution, the course concentrates on economic growth in several dimensions, especially agricultural, industrial, organizational, technological, and urban. The United States receives greatest attention. Prerequisite: Economics 121, 122 or permission of the instructor.

375. ECONOMETRICS The application of statistical techniques such as multiple regression to the modeling and forecasting of economic phenomena. Both macro- and microeconomic applications will be studied. Prerequisite: Math 221 , or 321 , or permission of instructor.
376. ALTERNATIVE ECONOMIC SYSTEMS A study of the goals and means of economic systems which are fundamentally different from our own. The systems considered will be both theoretical models, such as those of perfectly competitive capitalism and market socialism, and actual cases, including those of the Soviet Union, China, and Yugoslavia.
473. HISTORY OF ECONOMIC THOUGHT A critical presentation of significant economic theories from the beginning to the present time, viewed as an expression of the individuality of the great thinkers and of their historical background. Prerequisite: 122.
475. MATHEMATICAL ECONOMICS Selected topics, to be announced prior to registration, in theoretical or applied economics, using mathematical or statistical techniques. Prerequisite: Senior major or permission of the instructor.
495, 496. ECONOMICS SEMINAR A reading, research, and conference course on selected economic topics. Prerequisite: Senior major or permission of the instructor.

MAJOR: nine courses in Economics, including 268, 278, either 495 or 496; also Mathematics 121, 122 or alternatively Mathematics 131 and Mathematics 221. Interdisciplinary Studies 301 may be substituted for one course in Economics in fulfilling the requirement for the major or minor.
MINOR: six courses, including 121 or 122.
NOTE 1. The student who expects to major in Economics should elect Mathematics 121, 122 (or the equivalent) early, preferably not later than the sophomore year; it is recommended that 268 and 278 be elected during the sophomore year. Prospective majors, as well as those planning graduate study in Economics or Business, should consult the department early concerning other course options.

## EDUCATION

See Psychology and Education

## ENGLISH

Professors Bowden, Schiffman, and Wishmeyer
Associate Professors Culp*, Harms, Rosen and Tirumalai Assistant Professors Bowie, Conner, Chairwoman, Kroll, Marbury, Davies and O'Brien

[^2]The English Department offers courses designed to introduce the student to the literatures of England and America and to develop a sense of the history of spirit and imagination. The English major cultivates a discipline and a methodology to see what lies behind bias and to question the validity of underlying assumptions. It develops the ability to communicate confidently and persuasively through training in the basic disciplines of the field-history, criticism, research, and writing.

In addition to graduate work in literature, English majors have traditionally entered such fields as teaching, law, public relations, publishing, personnel, journalism, and government service.
101. WRITING SEMINARS Closely supervised practice in effective writingexpository, persuasive, expressive.
102. WRITING SEMINARS Continued practice in effective writing. Open to freshmen. Prerequisite: 101. One-half or full course.
210. INTRODUCTION TO LITERATURE Close reading and analysis of poetry, drama, fiction, and non-fictional prose, selected from a range of chronological periods with an emphasis on developing the techniques of critical writing. Special topics may be announced. Open to freshmen.
211. MAJOR BRITISH WRITERS I From earliest times through the eighteenth century; emphasis on Chaucer, Spenser, Shakespeare, Bacon, Donne, Milton, Swift, Pope, Johnson, and Boswell. Open to freshmen.
212. MAJOR BRITISH WRITERS II From 1798 to the present; intensive study of the Romantics, the Victorians, Shaw, Yeats, and Eliot. Open to freshmen.
213. LITERATURE OF THE WESTERN WORLD I Readings in English from literary masterpieces of the ancient and medieval periods with particular significance for Western culture, notably Homer, Herodotus, the Greek dramatists, Vergil, medieval epics, and Dante. Open to freshmen.
214. LITERATURE OF THE WESTERN WORLD II A continuation of 213 through the Renaissance and modern periods; emphasis on Boccaccio, Chaucer, Erasmus, Rabelais, Montaigne, Cervantes, Moliere, Racine, Voltaire, Goethe, Dostoevsky, Tolstoi, and Ibsen. Open to freshmen.
215. SURVEY OF AFRO-AMERICAN LITERATURE An introduction to the breadth and variety of literature produced by Black Americans. The course begins with an examination of the folk poetry and tales, and continues to mid-twentieth century. Open to freshmen.
221, 222. TOPICS IN ENGLISH AND AMERICAN LITERATURE Selected topics in the various periods of English and American literature, to be announced each semester, providing an introduction to techniques of literary analysis. The professor will assign at least four short papers and work closely with each student to develop ability to write critical papers. Prerequisite: college-level course in literature.
225. ADVANCED EXPOSITORY WRITING Special attention to the development of ideas and their critical appraisal. Prerequisite: 101 or permission of the chairman.
235. HISTORY OF THE ENGLISH LANGUAGE The origins and growth of English and of American English, the sources of our vocabulary, and the processes of semantic change. Open to freshmen.
236. STRUCTURE OF THE ENGLISH LANGUAGE An intensive review of conventional grammar and an introduction to structural linguistics and to generative-transformational grammar. Open to freshmen.
281. CREATIVE WRITING I The writing and discussion of fiction, poetry, criticism, essays, and/or drama. Prerequisite: permission of the instructor.
282. CREATIVE WRITING II Further writing and discussion of fiction, poetry, criticism, essays, and/or drama. Prerequisite: permission of the instructor.
310. LITERATURE OF THE NON-WESTERN WORLD Readings in English translation from literary classics of the Near and Middle East, India, China, and Japan. Prerequisite: a college level course in literature.
311. MAJOR AMERICAN WRITERS I From Puritan times to the Civil War, with emphasis on major writers from Poe to Whitman. Prerequisite: a college level course in literature.
312. MAJOR AMERICAN WRITERS II From the Civil War to the present, with emphasis on major writers from Twain to Hemingway. Prerequisite: a college level course in literature.
330. CLASSICAL AND BIBLICAL INFLUENCES IN ENGLISH LITERATURE Selections in translation, with critical consideration of their use from the Middle Ages to the twentieth century. Emphasis on the nature and function of myth and the uses of literary forms. Prerequisite: a college level course in literature.
331. CHAUCER The poet and his century, with emphasis on The Canterbury Tales and Troilus and Criseyde. Prerequisite: 211 or 213.
332. RENAISSANCE ENGLISH DRAMA From its medieval beginnings to the closing of the theaters in 1642, with emphasis on major figures such as Marlowe, Jonson, and Webster, but excluding Shakespeare. Prerequisite: 211, 213, or 214, or permission of the instructor.
340. STUDIES IN ENGLISH RENAISSANCE LITERATURE Non-dramatic literature of the Elizabethan period, with emphasis on major figures such as Sidney, Shakespeare, and Spenser. Special topics may be announced. Prerequisite: 211,213 , or 214 , or permission of the instructor.
341. SHAKESPEARE I Early plays, comedies, and histories, and a sampling of critical approaches to these plays. Prerequisite: 211, 213, or 214.
342. SHAKESPEARE II Problem comedies, tragedies, and romances, and a sampling of critical approaches to these plays. Prerequisite: 211, 213, or 214.
353. ENGLISH LITERATURE OF THE SEVENTEENTH CENTURY The chief writers and movements from the age of Donne and Jonson to the Restoration, excluding Milton. Prerequisite: 211,213 , or 214 , or permission of the instructor.
354. MILTON A detailed study of the poetry and prose. Prerequisite: 211, 213, or 214, or permission of the instructor.
367. ENGLISH LITERATURE OF THE EIGHTEENTH CENTURY Representative English writers and tendencies of the neoclassic Augustan period, with emphasis on Dryden, Swift, and Pope. Sentiment and Satire. Prerequisite: 211, 212, 213 , or 214.
370. THE ENGLISH NOVEL The development of the novel as a genre in England, with emphasis on major works from the eighteenth and nineteenth centuries. Prerequisite: a college level course in literature.
371. ENGLISH LITERATURE OF THE ROMANTIC MOVEMENT Major writers and characters. Prerequisite: 212 or 214.
372. THE VICTORIAN AGE Major writers and trends of the period. Prerequisite: 212 or 214.
375. THE CONTINENTAL NOVEL Major trends and movements in western European fiction, particularly from Romanticism through World War I, with special attention to influences on and from English and American novelists. All readings will be in English. Prerequisite: a college level course in literature.
380. TWENTIETH-CENTURY FICTION American, British, and continental novels and short stories. Prerequisite: 211, 212, 213, or 214.
381. TWENTIETH-CENTURY AMERICAN AND BRITISH POETRY Representative poets and major tendencies. Prerequisite: a college level course in literature.
382. MODERN DRAMA I Ibsen to O'Neill. Prerequisite: a college level course in literature.
383. MODERN DRAMA II American, British, and continental theatre from 1930 to the present. Prerequisite: a college level course in literature.
390. THE AMERICAN NOVEL The development of the novel as a genre in America, with emphasis on major works from Hawthorne to Dreiser. Prerequisite: a college level course in literature.
391. CURRENTS IN AMERICAN POETRY An examination of continuing trends and themes in American poetry from the seventeenth century to the present. The focus will be upon the close reading of texts and the relationship between the poet and society. Prerequisite: college level course in literature.
392. LITERARY CRITICISM Readings in English of major critical writers from Plato to the present, aimed at establishing a foundation for the development of informed literary judgments. Prerequisite: 211, 212, 213, or 214.
401. SEMINAR IN AMERICAN LITERATURE Prerequisite: permission of the instructor.
402. SEMINAR IN SHAKESPEARE Prerequisite: permission of the instructor.
403. SEMINAR IN ENGLISH LITERATURE BEFORE 1700 Prerequisite: permission of the instructor.
404. SEMINAR IN ENGLISH LITERATURE OF THE EIGHTEENTH AND NINETEENTH CENTURIES Prerequisite: permission of the instructor.
405. SEMINAR IN ENGLISH LITERATURE OF THE TWENTIETH CENTURY Prerequisite: permission of the instructor.

MAJOR: ten courses, including two from the group 211, 212, 213, and 214; one from the group 341,342 , and 402 ; and one from each of the following groups:

Group 1: 331, 332, 340, 353, 354, 403
Group 2: 367, 370, 371, 372, 404
Group 3: 311, 312, 390, 391, 401
Group 4: 380, 381, 382, 383, 405
Note: If the topic of English 221 or 222 falls within one of the chronological periods of literary study, the topics course may be used to fulfill the appropriate group requirement. The seven courses taken to satisfy these specific requirements cannot be taken Pass/Fail. The three additional courses for the major may be taken Pass/Fail. Students contemplating graduate work in English should take 211-212 and should acquire some knowledge of two foreign languages, preferably French and German. History 243, 244 and Fine Arts 101, 102 are also recommended.
MINOR: six courses, including five courses in literature. Minors must elect two courses from among 211, 212,213, and 214, and at least two courses from the following group: 311, 312, 331, 332, 340, 341, 342, 353, 354, 367, 370, 371, and 372.

TEACHER CERTIFICATION: The English Department requires its majors who wish to secure teacher certification to schedule the following courses within the existing requirements:
a. English 225
b. English 236 (preferably to be taken before enrollment in the Professional Semester in Teacher Education).
c. English 380, 381, or 382 (taken as the Group 4 requirement).

Additionally, students are urged to enroll in English 235, 310, and 392 and in Public Speaking.

## ENVIRONMENTAL STUDIES

111. ENVIRONMENT, CULTURE, AND VALUES A study of the effects of scientific, religious, and philosophical values on man's attitudes toward his environment and how these attitudes may affect our way of life. After exploring the myths that many live by consciously or unconsciously, and subjecting these to careful criticism, alternative world models will be considered together with the changes in life style and consciousness that these may involve.

131, 132. ENVIRONMENTAL SCIENCE An integrated, interdisciplinary study of natural environmental systems and man's impact on them. Basic concepts of ecology and energy will be examined and utilized to study world resources, human population dynamics, pollution and pollution control. Field study will be emphasized. Three hours classroom and three hours laboratory a week. (131, 132 will satisfy the one year laboratory science distribution requirement.)

## FILM

201. HISTORY AND ART OF THE FILM A study of the history of the film as an art form, with emphasis on developing fruitful critical standards for the judgment of films.

# FINE ARTS 

Professor Akin, Chairman<br>Assistant Professors Ferguson, Hirsh, and Weller

Courses in Fine Arts are taught with the understanding that art is a visual language. The student is presented with the means of comprehending the language as well as methods of understanding the esthetic and historical significance of the visual arts. Departmental offerings should be elected, wherever possible, in conjunction with related courses in history, music, philosophy, religion and classical, foreign and English literature. Optional majors provide an art history emphasis or a balance between studio and art history. Each plan can lead to graduate study and careers in the visual arts.
101, 102. AN INTRODUCTION TO THE HISTORY OF ART A survey of painting, sculpture, architecture, and the minor arts created by the world's leading civilizations. In 101, examples are chosen from prehistoric, primitive, ancient, and medieval European art. In 102, the arts of western Europe beginning with the Renaissance are considered.
109. CERAMICS Locally mined clays will be made into pottery, sculpture, and mosaic forms. This course does not count toward distribution requirements.
202. ANCIENT ART The art and architecture of ancient Egypt, Mesopotamia, Greece, and Rome are considered with major emphasis devoted to the art of Greece and Rome. Prerequisite: 101 or 102.
203. MEDIEVAL ART European art and architecture of the Middle Ages, from the decline of the Roman Empire to the fourteenth century. Particular emphasis is placed on early Christian, Romanesque, and Gothic art. Prerequisite: 101 or 102.
204. NORTHERN RENAISSANCE ART A study of the art of northern Europe in the fifteenth and sixteenth century, with particular emphasis on Germany and Flanders. Special consideration is given to the work of Dürer, Grünewald, Cranach, and Altdorfer and to that of Hubert and Jan van Eyck, Roger van der Weyden, Memling, Bosch and Bruegel. Prerequisite: 101 or 102.
207. FUNDAMENTALS OF PAINTING AND DESIGN A studio course consisting of eight hours of practical work a week: four hours supervised and four hours pursued independently. Instruction is offered in materials, several media of drawing and painting, composition, design and color theory. This course does not count toward distribution requirements.
209. ORIENTAL ART An introduction to the artists and art forms originating in the Orient. Examples will be selected from the major cultural traditions of South and East Asia.
254. PHOTOGRAPHY AND CINEMATOGRAPHY Introduction to darkroom techniques and the multi-media uses of photography and cinematography. This course does not count toward distribution requirements.
301. ITALIAN RENAISSANCE ART Italian painting, sculpture, and architecture of the fifteenth and sixteenth centuries will be considered. The works of Ghiberti, Donatello, Brunelleschi, Masaccio, Leonardo, Piero della Francesca, Raphael, and Michelangelo will be reviewed in some detail. Theoretical and critical writings of the period will be discussed. Prerequisite: 101 or 102 .
302. BAROQUE ART European painting, sculpture, and architecture of the seventeenth century will be considered. Particular emphasis will be placed upon the works of Caravaggio, the Carracci, Bernini, Borromini, Rubens, Rembrandt, Vermeer, Velasquez, and Poussin. Critical and theoretical writings of the period will be discussed. Prerequisite: 101 or 102.
304. AMERICAN ART The development of painting, sculpture, and architecture in America. Special consideration will be given to the problem of what constitutes an American style in the arts and the relationship between art and culture. Prerequisite: 101 or 102.
307. ART HISTORICAL METHODS Some considerations of the research tools of art historical analysis including bibliographical methodology and a study of the use of sources, secondary courses, and documents in art history. In addition, the major schools of art historical writing and theory since the Renaissance will be considered. Prerequisite: 101 or 102.
313. 19th CENTURY ART Problems of Romanticism and Realism will be introduced through a survey of works by Goya and David. Major 19th century figures and movements will be surveyed, including the Nazarenes. Friederich, Blake, Palmer, Constable, Turner, the PRB, Ingres, Gericault, Delacroix, Corot, Barbizon School, Courbet, Daumier, Manet, and the Impressionists. Prerequisite: 102.
314. 20th CENTURY ART A survey of major European artists and movements from 1880 to the present, including Post-Impressionism, Symbolism, Fauvism, Cubism, Futurism, de Stijl, the School of Paris, Dada, Surrealism, Pop Art, and current trends. Prerequisite: 102.
355. PAINTING Various painting media will be explored including oils, watercolor, and acrylic. Prerequisite: 207.
356. SCULPTURE Various sculpture media will be explored including clay, plaster, wood, stone, and metals. An emphasis will be placed on carving, casting, and metal welding. Prerequisite: 207.
357. GRAPHICS Various print making media will be explored including woodcut, silk screen, and etching. Prerequisite: 207.
358. DRAWING The course will be devoted to working from the human form during which the student will be expected to develop his sense of two dimensional line and three dimensional illusionistic form through the use of such graphic media as pen and ink, pencil, charcoal, conte crayon, etc. Prerequisite: 207.
391, 392. STUDIES IN ART HISTORY Studies in selected topics of the history of art and architecture. The content of each course will be altered periodically. Prerequisite: 101 or 102.
403. SEMINAR: PROBLEMS IN ITALIAN ART The study of an artist, movement, or problem to be selected from the Italian Renaissance. Prerequisite: 102 and permission of the instructor.
404. SEMINAR: PROBLEMS IN MODERN ART The study of an artist, movement, or problem to be selected from the 19th or 20th century art. Prerequisite: 102 and permission of the instructor.

MUSEUM STUDIES AND INTERNSHIP A two semester academic program designed to provide a critical understanding of the cultural place of an urban museum and the responsibilities and procedures of a professional staff developing the museum as an educational institution. One course credit per semester. Offered by special arrangement. Consult with the Chairperson of the Fine Arts Department.
MAJOR: Option one, with emphasis in art history: nine courses, including 101, 102 and 301, 302*, 313 and 314. In addition, 307 is strongly recommended for the senior year. Honors and independent study courses may be applied to the major. Option two, with a balance between direct studio experience and art history: five art history courses, including 101 and 102; four studio courses.

MINOR: six courses, including 101, 102, 301 or 302,313 or 314,307 is recommended.

NOTE: A reading knowledge of French and German is necessary for graduate work in the history of art. For those wishing to specialize in antique and medieval art in graduate school, Latin is necessary.

TEACHER CERTIFICATION: Elementary teacher's certification for Fine Arts Majors is granted through the Consortium, with Gettysburg College as the certifying school. Questions regarding this program should be directed to the Fine Arts Chairman and the Director of Teacher Education.

* 302, or a suitable substitute.


## FRENCH

## Professor Angiolillo

## Associate Professors Henderson and Kline, Chairman <br> Assistant Professors Fitzpatrick, Oliver, and Petrucelli

The courses in French are designed to provide well-balanced training in language, literature and civilization for those who elect a major or minor in the department. Those who do not wish to meet the requirements for a major or minor may elect any courses for which they have the prerequisites as stated in the description of courses. Instruction on the elementary and intermediate levels is on an intensive basis, with five contact hours a week, including laboratory.

Unless otherwise indicated, all courses above the intermediate level are conducted in French.

101-104. ELEMENTARY FRENCH An intensive study of the fundamentals of French grammar, with special attention given to pronunciation and oral expression. Composition, and literary and cultural readings. Please refer to Graduation Requirements (Languages).
115. INTERMEDIATE READINGS IN FRENCH A translation course which develops facility in reading a variety of French texts and creatively rendering them into English. Prerequisite: 104 or the equivalent. See Note 3.
116. INTERMEDIATE FRENCH An extension of the French experience through conversation, as well as grammar and selected readings. Prerequisite: 104 or the equivalent. See Note 3.

231, 232. FRENCH CONVERSATION AND COMPOSITION Advanced practice in speaking, writing, and understanding the modern colloquial idiom. Prerequisite: 116 or the equivalent with a grade of at least $C$.
233. INTRODUCTION TO FRENCH LITERATURE Provides the student with the tools necessary for a basic understanding and study of French literature, through the examinations of selected works. Emphasis on explication de texte, various genres, methods of criticism, bibliography. Prerequisite: 116 or the equivalent with a grade of at least $C$. Required of French majors.
234. MASTERPIECES OF FRENCH LITERATURE. A close study of a variety of works representative of their periods. Prerequisite: 233 or the equivalent or permission of the instructor. Required of French majors.
243. INTRODUCTION TO FRENCH CIVILIZATION Intended for students who have not yet lived in France. Major geographical, regional, historical and other influences which have shaped the evolution of French civilization. Prerequisite: 116 or the equivalent.
290. INTENSIVE ORAL AND WRITTEN FRENCH Intended for students who desire to increase fluency and develop styles in use of the French language. Stress on accuracy and command of expression at various levels of the language. Prerequisite: 232 or the equivalent.
305. SPECIAL TOPICS IN FRENCH LANGUAGE An extensive examination of selected aspects of the French language. Topics chosen at the discretion of the instructor and in consultation with the majors, e.g. Linguistic aspects of la francophonie, applied phonetics, stylistics, history of the language, etc. Specific topics to be announced before registration. Given in alternate years. Prerequisite: 290 or permission of the instructor.
344. TOPICAL ASPECTS OF FRENCH CIVILIZATION In-depth study of several aspects of French civilization. Work accomplished in common purpose and as individual research. Intended for students who have lived in France, or who have basic knowledge of the structure of French civilization. Offered in alternate years. Prerequisite: 243 or the equivalent.

346 LA FRANCOPHONIE Introduction to French-speaking civilizations outside France, and in-depth study of French Canada. Historical, political and cultural problems of minority Francophone cultures. Offered in alternate years. Prerequisite: 243 or the equivalent.
352. THE THEATRE OF THE SUBLIME The search for perfection in Classical France. Moliere, Corneille, Racine. Offered on occasion as a bi-lingual course in French and English. Offered in alternate years. Prerequisite: 234 or the equivalent or permission of the instructor.
354. REASON AND REVOLUTION The Enlightenment: a century of intellectual ferment which challenged the values of the establishment and swept them away in a revolution. Montesquieu, Voltaire, Diderot, Rousseau. Offered on occasion as a bi-lingual course, in French and English. Offered in alternate years. Prerequisite: 234 or the equivalent.
357. ROMANTICS, REALISTS AND REBELS The nineteenth century in France seen principally through novels and poetry of the period, in which the alternating currents of revolution and restoration set the stage for the modern era.
358. THE FRENCH NOVEL IN THE TWENTIETH CENTURY A study of the theory of the modern French novel and a critical reading of selected works from the writings of novelists from Proust to the nouveaux romanciers. Offered in alternate years. Prerequisite: 234 or the equivalent.
360. MODERN FRENCH THEATRE Representative plays and dramatic theory of the French stage in the twentieth century. Emphasis on the idea of the theatrical avant-garde and its development from Jarry to theatre of the absurd. Offered on occasion as a bi-lingual course. Offered in alternate years. Prerequisite: 234 or permission of the instructor.
361. FRENCH LITERATURE IN THE RENAISSANCE Major works from the prose, poetry, and theatre, with particular emphasis on Rabelais and the development of humanism, the theory and practice of the Pleiade, and Montaigne. Offered in alternate years. Prerequisite: 234 or the equivalent.
362. SEMINAR IN FRENCH LITERATURE A thorough investigation of a major figure or important literary trend (chosen at the discretion of the instructor and in consultation with the majors) in French literature with emphasis on seminar reports and discussions. Recent themes have been: Evil, Chretien de Troyes, Seduction. Offered in alternate years. Prerequisite: Major in French.
364. SPECIAL TOPICS IN FRENCH LITERATURE OR CIVILIZATION Indepth analysis and discussion of selected areas and problems. Recent topics have included: Women in French Literature, Camus, Theatre of the Absurd, FrenchCanadian novel. Prerequisite: permission of the instructor. One-half or full course. Offered in alternate years.
MAJOR: Nine courses, numbered 231 and above (including 233 and 234) at least eight of which must be in the Department (French 290 is suggested for those planning to teach). The course that is taken outside the Department must have departmental approval.

MINOR: Five courses numbered 231 and above, including 231 or 232 (either of which may be waived by special permission of the Department).

Note 1: Beginning with the class of 1977, senior majors will take a majors examination in French. Results will be noted in the student's record.

Note 2: To elect a major in French, students must have attained an inclusive average of at least 2.00 in all French courses taken in college.
Note 3: French 115 and French 116 are similar in course content, therefore, either one, but not both, may be taken for credit.

## GEOLOGY

Professor Vernon
Associate Professors Hanson, Chairman, and Potter
Instructors Rossbacher and Wilderman
The course offerings in the Department of Geology offer a comprehensive view of the principal areas of the science of geology and experience in the fundamentals of geological investigation. This program is provided for students planning to proceed with graduate study or research in the field or to enter directly into positions for which geological training is a requisite, as well as to stimulate understanding and enjoyment of the region in which the student lives.

131, 132. GENERAL GEOLOGY Geological principles and external processes, including rock weathering and soils, river action and valley development, effects of glaciers, oceans, and volcanoes. Internal processes and their effects are examined, along with earth movement in mountain building, faulting and folding. Emphasis also will be placed on the physical and biological history of the earth and the application of the earth sciences to the solution of contemporary environmental problems. Three hours classroom and three hours laboratory each week.
201. GEOMORPHOLOGY The description and interpretation of the relief features of the earth's continents and ocean basins with a comprehensive study of the basic processes which shape them. Two hours classroom and three hours laboratory a week. Given in alternate years. To be given in 1976-1977. Prerequisite: 131.
203. ECONOMIC GEOLOGY Covers the mineral fuels, coal, oil, and gas, the major ore deposits, and the building materials including their geographic distribution, geologic occurrence, origin, and uses. Given in alternate years. To be given in 19771978. Prerequisite: 131.
205. MINERALOGY A course in descriptive mineralogy in which the various mineral groups are studied. Includes crystallography, general physical properties, and chemical and systematic mineralogy. Two hours classroom and three hours laboratory a week. Prerequisite: 131 and Chemistry 131, 132 or concurrent registration therein.
206. PETROLOGY A systematic study of the modes of occurrence, origin, and classification of rock types. Laboratory studies will be focused on the megascopic identification of the common rocks. Two hours classroom and three hours laboratory a week. Prerequisite: 205.

207. INVERTEBRATE PALEONTOLOGY A systematic study of the invertebrate fossil groups, their evolution, and their relationships to living animals. Two hours classroom and three hours laboratory a week. Given in alternate years. To be given in 1977-1978. Prerequisite: 131, 132 or Biology 111, 112.
209. SEDIMENTOLOGY A systematic study of source materials, transport, depositional environments, lithification and diagnosis of sediments. Two hours classroom and three hours laboratory a week. Prerequisite: 131 or permission of the instructor.
210. STRATIGRAPHY Principles of organization and interpretation of the stratigraphic record. Emphasis on the stratigraphy of the Appalachians and selected European areas. Two hours classroom and three hours laboratory a week. Three Saturday field trips. Given in alternate years. To be given in 1976-1977. Prerequisite: 131, 132, 205, 209.
221. MARINE GEOLOGY An introduction to physical marine science including the physics and chemistry of the ocean, the morphology of the ocean floor, and the processes involved with the formation and maintenance of ocean basins. Topics include the description and geotectonic explanation for ocean basins, rises, trenches, island arcs, mid-oceanic ridges, and new oceanic crust. Also considered are the character and distribution of chemical and detrital sediments in the marine system, including turbidites, pelagic sediments, and carbonates. Prerequisite: one year of a laboratory science.
301. FIELD GEOLOGY A course in some of the basic geological field techniques, with the preparation of topographic and geologic maps and reports from data obtained by the student in the field. Two hours classroom and three hours laboratory a week. Prerequisite: 131, 132.
302. STRUCTURAL GEOLOGY Tectonics, properties, relationships, and positions of the component rock masses of the earth. Two hours classroom and three hours laboratory a week. Prerequisite: 301.
303. GEOCHEMISTRY Introduction to the origin of the elements and to geochemical cycles in the earth's atmosphere, hydrosphere and lithosphere. Includes radioactive dating methods and stable isotope geology. Given in alternate years. To be given in 1976-1977. Prerequisite: Chemistry 131 or concurrent registration therein. May be counted toward a chemistry major.
311. SPECIAL.TOPICS In-depth studies in special geological topics to be offered on the basis of need and demand. Recent topics have included the Geology of Pennsylvania and Land Use Planning. Prerequisite: Permission of the instructor. One half or one course.
315. HISTORICAL GEOLOGY The history of the earth, its changing features, and the development of its animal and plant inhabitants. Two hours classroom a week. Given in alternate years. To be given in 1976-1977. Prerequisite: 209 and 302. One-half course.
318. OPTICAL MINERALOGY Crystal optics and use of the polarizing microscope for the examination of minerals by the immersion method and rocks in thin section. Two hours of classroom and three hours laboratory a week. Given in alternate years. To be given in 1977-1978. Prerequisite: 206 or concurrent registration therein.
324. SEMINAR A reading, research, and conference course on topics in geology and related interdisciplinary fields. Prerequisite: permission of the instructor. Onehalf course.

MAJOR: nine courses including 131, 132, 205, 206, 209, 301, and 302. In addition, Chemistry 131, 132 is required.

MINOR: six courses including 131, 132.
NOTE: Any student desiring departmental recommendation for graduate work must also satisfactorily complete Mathematics 121,122 or 131, 132 and Physics 111,112 or 131, 132. (Physics 202 may be substituted for Physics 112 or 132.)

## GERMAN AND RUSSIAN

Professor Bogojavlensky*
Associate Professor Steiner, Chairman
Assistant Professors Eddy, Rollfinke, Segall, and L. Woodworth

Courses in German and Russian are designed to provide well-balanced training in language, literature and civilization. Students may elect a major or minor in German, or include the Russian offerings as part of a major in Russian and Soviet Area Studies. Those who do not wish to meet the requirements for a major or minor may elect any courses for which they have the prerequisites as stated in the course descriptions. Instruction on the elementary and intermediate levels is on an intensive basis with five contact hours a week.

Unless indicated otherwise, all courses above the elementary level are conducted in the foreign language.

## German

101-104. ELEMENTARY GERMAN An intensive study of the fundamentals of German grammar, with special attention given to pronunciation and oral expression. Composition, and literary and cultural readings. Please refer to Graduation Requirements (Languages).
115. INTERMEDIATE READINGS IN GERMAN Readings with attention to translation as well as to the mastery of problem areas in the grammar. Prerequisite: 104 or the equivalent. See Note 2.
116. INTERMEDIATE GERMAN Introduction to conversation and composition, with attention paid to problem areas of German grammar. Complementary readings include both fiction and contemporary essays. See Note 2.

215, 216. TOPICS IN GERMANIC STUDIES An examination of some topic related to German culture, with format and content to be determined each semester. Recent topics include: The Grotesque in German Art and Literature, Faust through the Ages, Women in Scandinavian Literature. Prerequisite: permission of the instructor.

231, 232. GERMAN CONVERSATION AND COMPOSITION This course aims to give the student a greater facility and advanced practice in developing conversational and compositional skills. Readings and discussions are on topics in German culture. Prerequisite: 116 or the equivalent, with a grade of at least $C$.
236. INTRODUCTION TO GERMAN LITERATURE An introduction to selected works of German literature and to the tools and methodologies available to the student of German literature. To be given in the spring semester of 1976-1977. Prerequisite: German 116 or the equivalent or permission of the instructor.
301. GERMAN LITERATURE FROM ITS BEGINNINGS TO THE REFORMATION A study of the major works and principal figures of the Old and Middle High German periods with special emphasis on the medieval epics and the Minnesänger through humanism and the Reformation. Given in the fall semester in alternate years. To be given in English in the fall semester of 1976-1977. Prerequisite: 236 or permission of the instructor.
304. GERMAN LITERATURE OF THE BAROQUE, RATIONALISM AND STURM UND DRANG A study of the major figures of the German baroque including Opitz, Gryphuis, and Grimmelshausen: German rationalism, pietism and rococo from Gottsched through Klopstock and Lessing to the literary figures of the Sturm und Drang. Given in alternate years. To be given in 1976-1977. Prerequisite: 236 or permission of the instructor.
305. THE AGE OF GERMAN CLASSICISM A study of the writings of Goethe and Schiller and of the era in which they lived. Given in alternate years. To be given in 1977-1978. Prerequisite: 236 or permission of the instructor.
307. THE AGE OF ROMANTICISM A study of German romanticism including the thoreticians and philosophers of the movement, the major genres and writers of the period. Given in the fall semester in alternate years. To be given in 1977-1978. Prerequisite: 236 or permission of the instructor.
308. GERMAN PROSE AND POETRY FROM REALISM THROUGH EXPRESSIONISM A study of the movements and writers of Germany from Heine and Grillparzer through realism and naturalism (including Keller, Meyer, Storm, Fontane, Hauptmann), to the first decades of the twentieth century. Given in the fall semester in
alternate years. To be given in 1977-1978. Prerequisite: 236 or permission of the instructor.
309. THE DRAMA OF THE NINETEENTH CENTURY A study of the main dramatists and dramatic movements of the nineteenth century, including Kleist, Grillparzer, Grabbe, Buchner, Hebbel, the early Hauptmann, young Wedekind and Hofmannsthal. Given in alternate years. To be given in 1976-1977. Prerequisite: permission of the instructor.

311, 312. MODERN GERMAN PROSE AND POETRY German prose and poetry from about 1900 to the present, including writings by Rilke, Mann, Hesse, Kafka, Böll, Grass, as well as more contemporary writers. Given in alternate years. To be given in 1977-1978. German 312 to be offered in English. Majors and minors are required to do primary reading in German and take an additional seminar hour conducted in German. Prerequisite: permission of the instructor.
313. MODERN GERMAN DRAMA A study of movements in twentieth century German drama from expressionism to the contemporary scene, including the dramatists Hauptmann, Wedekind, Kaiser, Brecht, Frisch, Dürrenmatt, as well as more contemporary writers. Given in the spring semester in alternate years. Majors and minors are required to do primary reading in German and take an additional seminar hour conducted in German. Prerequisite: permission of the instructor.
314. SEMINAR IN GERMAN LITERATURE AND/OR LANGUAGE A thorough investigation of a significant figure or major development in German literature or an extensive examination of selected aspects of the German language, with emphasis on seminar reports and discussions. Recent topics include: Böll und Grass, Sagen und Legenden. Given in alternate years. To be given in 1977-1978. Prerequisite: major in German or permission of the instructor.

MAJOR: Nine courses, numbered 215 and above, including 236 and, normally, 314. Eight of these courses must be taken in the department, and at least six of the nine courses must be in the German language. Any courses toward the major taken outside the department must be approved by the German section.

MINOR: Five courses numbered 215 or above, normally including 231 or 232. Four of these courses must be in the German language.

NOTE 1: To elect a major, a student must have attained an inclusive average of at least 2.00 in all German courses taken in college.
NOTE 2: German 115 and German 116 are similar in course content, therefore, either one, but not both, may be taken for credit.

## Russian

101-104. ELEMENTARY RUSSIAN Study and intensive application of the grammar: phonetics, morphology, syntax. Initial emphasis given to achieving oral competence, later to include graded reading and composition. Please refer to Graduation Requirements (Languages).
116. INTERMEDIATE RUSSIAN Advanced grammar review incorporating controlled reading and composition. Emphasis on speaking competence continued through oral reports and conversational topics. Prerequisite: 104 or the equivalent.
231, 232. RUSSIAN CONVERSATION AND COMPOSITION Practice in the techniques and patterns of everyday conversation, especially as these reflect the different cultural orientation. Reading and discussion of short works by well-known Russian authors. Prerequisite: 116 or the equivalent, with a grade of at least $C$.
*233, 234. MASTERPIECES OF RUSSIAN LITERATURE Reading and discussion of literary works by representative authors from the pre- and post-Revolutionary periods. Prerequisite: 116 or the equivalent, with a grade of at least $C$.
352, 353. RUSSIAN LITERATURE IN TRANSLATION An introduction to Russian literature, presenting its development from the earliest period to the present. Special attention will be given to works of social, political, and religious significance within the historical context. Offered in alternate years. To be given in 1976-77.
354. THE WORKS OF TOLSTOY AND DOSTOYEVSKY A study of the major works of Tolstoy and Dostoyevsky with a focus on art as a reflection of the author's interaction with his environment. Offered in alternate years. To be given in 1977-1978. Conducted in English.
355. SURVEY OF SOVIET LITERATURE A study of Soviet literature from Gorki to contemporary authors, with an emphasis on political trends and influences. Offered in alternate years. Conducted in English.
390. TOPICS IN RUSSIAN STUDIES Format and content will be determined in consultation with students. To be given in English. Prerequisite: permission of the instructor.
NOTE: Major and minor programs are not offered in the Russian Language. See Russian and Soviet Area Studies, and the Self-Developed Major Program.

## GREEK

(See Classical Studies)

## HEBREW

(See Classical Studies)

## HISTORY

Professors Garrett, Chairman, and Gates
Associate Professors Carson, Jarvis, Rhyne, and Weinberger
Assistant Professors Klinge, Pfau, and Conners
Instructor Weissman
The offerings in history are planned to serve the following purposes: to inform students interested in man's past, to acquaint them with the leading in-
terpretations of their heritage, to encourage them to comprehend and utilize historical perspectives, and to introduce them to the methodology and techniques of historical analysis. Students elect courses in the department as a component of their liberal education, as a preparation for graduate study and for the teaching of history, to complement their work in other disciplines, and to provide a background for such careers as law, journalism, and library science.

111, 112. HISTORY OF WESTERN CIVILIZATION The elements of continuity and the phases of change in the civilization that matured in Europe from its beginnings in the Near East and Greece to its current expansion into other areas of the world.

117, 118. AMERICAN HISTORY A survey of the colonial origins and national development of the United States from 1607 to the present. Some attention is given to interpretations by leading historians.
119. SOUTH ASIA: INDIA AND PAKISTAN Following a survey of the origin and formation of traditional Hindu civilization and the impact of Moslem culture, the emphasis is placed on nineteenth and twentieth century British India, with particular attention to the rise and triumph of nationalist movements.
120. EAST ASIA: CHINA AND JAPAN An introduction to the classical tradition of Chinese and Japanese civilizations followed by an analysis of the changes brought about by the impact of modernization in the nineteenth and twentieth centuries.
190. INTRODUCTION TO HISTORY Through selected readings and discussion about the nature of history, and through analysis and projects related to selected historical problems the student is introduced to the art and techniques of the discipline. Normally elected in the freshman year.

243, 244. ENGLISH HISTORY: 55 B.C. TO DATE First semester: the political and social evolution of England to the end of the seventeenth century. Second semester: Britain and the Empire to the present.

253, 254. HISTORY OF RUSSIA First semester: from earliest times to the reign of Nicholas II. Second semester: fall of the czardom, the Russian revolution, and the Communist state from Lenin to Krushchev.
271. EIGHTEENTH CENTURY EUROPE: UTRECHT TO VIENNA, 1713-1815 Facets of the Enlightenment; intellectual ferment; expansion of Europe; the forces of revolution and the impact of Napoleon. Given in alternate years. To be given in 1976-1977.
272. NINETEENTH CENTURY EUROPE: 1815 to 1914 Starts with the Congress of Vienna and proceeds with the reaction after 1815, the revolutions of the midcentury, unifications of Germany and Italy: problems of nationalism, imperialism, liberalism; and concludes with diplomatic background for the First World War.
273. TWENTIETH CENTURY EUROPE: SINCE 1914 Political, economic, and social sequels to Versailles; the challenge to European dominance and changing relations with Russia and the United States; the rise of totalitarianism to World War II and its consequences.
281. TWENTIETH CENTURY AMERICAN HISTORY The social, economic, and political development of the United States since 1900. Domestic events are stressed.
282. DIPLOMATIC HISTORY OF THE UNITED STATES Emphasis upon the diplomacy of the early Republic, expansion, the emergence of the United States as a world power, and the use of collective security.
289. THE NEGRO IN AMERICA A survey of black history from pre-colonial Africa and the origins of slavery in the American colonies to the urban migrations of the twentieth century.
311. STUDIES IN AMERICAN HISTORY Selected areas and problems in American history. Specific topics announced each year. Prerequisite: 190 or permission of the instructor. Offered occasionally.

313, 314. STUDIES IN EUROPEAN HISTORY Selected areas and problems in European history. Specific topics announced each year. Prerequisite: 190 or permission of the instructor. Offered occasionally. 314 offered in Bologna only.
315. STUDIES IN COMPARATIVE HISTORY Selected trends and problems studied comparatively in various periods and geographical areas. Specific topics announced each year. Prerequisite: 190 or permission of the instructor. Offered occasionally.
325. MEDIEVAL HISTORY The development of European civilization from the disintegration of Roman imperial authority to the late thirteenth century, with some attention to eastern Europe. Given in alternate years. To be given in 1976-1977.
327. EUROPE IN THE RENAISSANCE, 1300-1500 The emergence of Europe from the Middle Ages. Particular attention will be given to the interrelationships of economic, social, political, and cultural change in Western Europe, with special emphasis being placed on Italy. Given in alternate years. To be given in 1977-1978.
328. EUROPE IN THE REFORMATION, 1500-1650 A study of the interaction between the unresolved tensions (social, religious, political, and economic) in Western Europe, and the men who shaped the Reformation and Counter-Reformation. Particular attention is given to Germany and to Luther. Given in alternate years. To be given in 1976-1977.
345. ENGLISH CONSTITUTIONAL AND LEGAL HISTORY A technical approach to the evolution of governmental and legal institutions in the context of English society. Offered occasionally.
347. AMERICAN COLONIAL HISTORY English America from the epoch of settlement through the achievement of independence. Particular attention is given to the causes and consequences of the American Revolution. Given in alternate years.

349, 350. AMERICAN INTELLECTUAL AND SOCIAL HISTORY A study of ideas, myths, and popular opinion in their social context with attention to American Puritanism, Enlightenment America, the Romantic era, labor and reform movements, intellectual revolt and conservatives, radicals, and liberals in modern America.
357. EUROPEAN INTELLECTUAL HISTORY. Main currents of Western thought from the seventeenth century to the present. The interaction of ideas and social development is stressed with attention to the influence of science. Given in alternate years. To be given in 1976-77.
358. 19th-20th CENTURY EUROPEAN DIPLOMACY European diplomatic history from the Congress of Vienna through World War II. Prerequisite: 112.
387. AMERICAN CONSTITUTIONAL HISTORY The framing of the Federal Constitution and its historical development, with emphasis on evolving interpretation by the courts. Given in alternate years. To be given in 1977-1978.
388. AMERICAN HISTORY IN THE CIVIL WAR PERIOD An analysis of the political, economic and intellectual aspects of nineteenth century America from 1828 to 1865. Attention is given to the causes and course of the Civil War. Given in alternate years. To be given in 1976-77.

## 389. SEMINAR IN EUROPEAN HISTORY: SELECTED TOPICS Prerequisite: permission of the instructor.

390. SEMINAR IN AMERICAN HISTORY: SELECTED TOPICS Prerequisite: permission of the instructor.
391. HISTORIOGRAPHY The history of historical writing derived from works of representative historians, past and present, as well as analysis of historical craftsmanship. The evolution of research techniques and historians' concepts about the nature and purpose of history receive attention. Prerequisite: six courses in history.
392. HISTORY SEMINAR An introduction to the craft of the historian. Includes discussion of theories on the meaning of history and study of research methods involving the solution of selected problems. Prerequisite: permission of the instructor.

MAJOR: nine courses including:
I. 190 (Must be completed or in cursu at time of acceptance as a major.)
II. One of the following: History $389,390,490,491$, Philosophy 355 or, when approved in advance by the department, a semester course in history in Independent Study or Independent Research which treats some aspect of the methodology or philosophy of history.
III. Two courses from one group and one from the other:

GROUP A: (European) 243, 244, 253, 254, 271, 272, 273, 313, 325, 327, 328, 345, 357, 358, 389.

GROUP B: (American) 281, 282, 289, 311, 347, 349, 350, 387, 388, 390.

MINOR: six courses, including at least two in American and two in European history.
NOTE 1: One of the following courses may be substituted for one of the courses in Group A: Classics 251, 252, 253 or 254.

NOTE 2: Training in computer science, foreign languages, and social science methodologies are desirable for those contemplating graduate study.

## INTERDISCIPLINARY STUDIES

Courses given under this rubric are taught by faculty members from at least two different disciplines.
100. COLLOQUIUM An interdisciplinary, highly intensive course dealing with various topics of importance common to the various divisions of a liberal arts curriculum. Particular topics to be announced. Offered occasionally (Summer School only). Prerequisite: Invitation by the staff of the Colloquium.
101. HUMANITIES An interdisciplinary examination of selected Western literary, philosophical and religious forms, ideas, and movements. Special attention will be given to exploring ways these creative expressions have developed a contemporary focus in the problems of cultural and self understanding. Specific organizing themes may change from term to term. Open to freshmen only.
301. ECONOMIC ANTHROPOLOGY Comparative study of peasant, tribal, and other non-modern economic systems. This course may be applied towards the major or minor in Economics and towards the major in Sociology-Anthropology. Offered in alternate years.

## INTERNATIONAL STUDIES

## Professor Nilsson, Director

An interdisciplinary major which utilizes primarily the perspectives of economics, history, and political science to examine a world of revolutionary change. The program is intended to prepare a student either for graduate study or for a career with an international focus. In addition to the foundations built in the aforementioned disciplines, the student is expected to pursue humanistic and cultural studies appropriate to a geographical area of his or her choosing. The interdisciplinary experience is completed with an integrative research seminar and a comprehensive examination.
401. INTERDISCIPLINARY SEMINAR Research which integrates the various disciplines in the major, normally involving the student's geographic area.

Core Disciplines: Eleven courses in the core disciplines (economics, history, and political science) are required, in any 6:3:2 combination which includes Economics 348 (International Economics), History 282 (U. S. Diplomatic History), Political Science 240 (International Relations) and either Political Science 370 (American Foreign Policy) or Political Science 375 (American National Security Policy). Example: Six courses in economics (including 348); plus three courses in history (including 282); plus two courses in political science (including 240 and either 370 or 375).

One course in each of the core disciplines may be taken on a pass/fail basis, with the exception of Economics 348, History 282, and Political Science 240.

Area Courses: Four courses in one geographical area (Asia, Latin America, Russia and Soviet Union, Western Europe), exclusive of courses in the core disciplines; three must be in the humanities. However, when the number of courses available in a given geographical area is inadequate to the student's needs-in the judgment of the supervising committee and the respective area representative-he or she may substitute area courses from other disciplines, including economics, history, and political science. As many as two of these courses may be taken on a pass/fail basis. (Total pass/fail from core and area courses $=$ five.)

Interdisciplinary Independent Study: During one semester of his or her last year, the student will enroll in an independent study. In it he or she will prepare for an examination in the core disciplines (international relations, international economics, and diplomatic history) and in his or her area. The examination will be administered in the eighth term by the supervising committee, which will announce at the beginning of each term whether the examination will be oral, written, or both.

Foreign Language Proficiency: (1) Satisfactory completion of courses through the intermediate level in a language appropriate to the geographic area chosen. (2) If a language is not offered at Dickinson, a proficiency examination will be administered with the assistance of the Modern Languages Department.

Study Abroad-One or two semesters (fall, spring, summer): A student may choose, with the approval of the supervising committee, any program of foreign study in the context of an international studies semester abroad program. Although majors are encouraged to go abroad, study abroad is not required.

Requirements for a Minor-Economics 348, History 282, Political Science 240; an additional course in each of the preceding core disciplines; two courses from the humanities in a geographic area; the interdisciplinary seminar. Total: nine courses.

Course Offerings in the Geographic Areas: The supervising committee and the respective area representatives will decide which courses in the geographic areas qualify for the major. The general operating principle for deciding will be that the list of courses should be as inclusive as possible. For example, any course in French literature would satisfy the western European area requirement. (A list of courses in the four areas is available in the coordinator's office.)

## ITALIAN

(See Spanish and Italian)

## JUDAIC STUDIES

## Associate Professor Rosenbaum, Director

An interdisciplinary major designed to allow broad comprehension of Jewish civilization in its interaction with the civilizations of the Ancient Near East and Europe, but deep enough to prepare students for further study or careers in Judaics and related vocational pursuits.

MAJOR:
I. Required courses:
a. Hebrew 211, 212 (Second year Biblical Hebrew)
b. Religion 103 (Torah, Prophets, \& Writings)
c. Religion 204, 205 (Jewish History) Both courses must be completed by the end of student's Junior year.
II. One of the following pairs of courses:
a. Religion 211, 206 (Aspects of American Religious Culture; Modern Jewish Thought)
b. Religion 203, 206 (Studies in the Hebrew Tradition; Introduction to Talmud)
c. Religion 107, $201^{-}$(The New Testament; Traditions in the History of Religions)
d. Religion 108, 109 (The Emergence of the Christian Tradition; The Emergence of the Protestant Tradition)
III. One upper level seminar OR Independent Study, with the approval of the coordinator.
IV. Two courses from those listed below with specific prior approval of the coordinator.
\(\left.\begin{array}{lll}American Studies \& 490,491 \& Seminar <br>
Classical Studies \& \begin{array}{l}Sem1,252 <br>
Hellenic History <br>
253,254 <br>
Roman History <br>
Classical \& Biblical Influences in <br>

English\end{array} \& 330\end{array} $$
\begin{array}{c}\text { English Literature }\end{array}
$$\right]\)| History | 190,490 | Introduction to History; Historiography |
| :--- | :--- | :--- |
| Philosophy | 230 | Philosophy of Religion |
| Religion | 211 | Aspects of American Religious Culture |
| Sociology | 365 | Religion and Social Order |
| Spanish | 290 | Topics in Hispanic Studies |

## LATIN <br> (See Classical Studies)

## LATIN AMERICAN STUDIES

(See Special Programs of Study)

## LIBRARY RESOURCES

Associate Professors Bowers, Cieslicki, Chairwoman, and Forbis
Assistant Professors J. Bechtel, Massey, Morton, and I. Woodworth*
201. INTRODUCTION TO LIBRARIES AND LIBRARY RESOURCES A study of libraries that begin with an introduction to the history and theory of library organization and proceeds to a study of the effective use of library resources including books, periodicals, documents, manuscripts, microforms, phonodiscs, indexes, bibliographies, and reference tools in the various disciplines. Special attention is focused on critical selection and evaluation of all tools and the logical patterns of research. (Not open to first semester freshmen.)
Independent Studies in Library topics is open only to juniors and seniors and can be taken only once.

# MATHEMATICS 

Professors Baric, Light, and Martin<br>Associate Professors Harvey and Stodghill, Chairman Assistant Professor Pence

The major program in mathematics offers preparation for graduate study and research, secondary school teaching, and work in industry or governmental agencies. Majors should complete 244 as early as possible (usually by the end of the sophomore year).
100. PRECALCULUS MATHEMATICS For students who plan to continue in mathematics but whose background in mathematics is deficient. Sets, numbers, and the elementary algebraic and transcendental functions. Prerequisite: permission of the instructor. This course does not count toward the requirements of a major or minor and will not satisfy the Division III Distribution Requirement.
*111, 112. FINITE MATHEMATICS Topics in logic, set theory, elementary probability, game theory, linear programming and applications. These courses do not count toward the requirements of a major or minor.
*121, 122. CALCULUS AND PROBABILITY Elements of the calculus and probability. Designed primarily for prospective majors in biology, economics or other social sciences. Topics will include differentiation, integration, probability density functions, estimation, hypothesis testing, regression, partial differentiation and multiple integration. Please read Notes 2 and 3.
*141, 142. CALCULUS An accelerated treatment of elementary calculus. Derivatives and integrals of functions of one variable with applications; analytic geometry of the conic sections. An introduction to partial differentiation, multiple integration, infinite series and differential equations. Please read Notes 2 and 3.
201, 202. SPECIAL TOPICS Topics to be announced when offered. Prerequisite: permission of the instructor. One-half or one course.
211. MATHEMATICAL MODELING Introduction to the methodology of modeling as a technique useful in working toward the solution of real world problems. A variety of mathematical tools will be utilized at an elementary level. This course will not count toward the requirements of a major or minor.
221. ELEMENTARY STATISTICS An introduction to statistical inference, including such topics as measures of central tendency and dispersion, tests of hypotheses, and correlation. Prerequisite: 100 or its equivalent. This course does not count toward the requirements of a major or minor.
232. NUMERICAL METHODS FOR COMPUTERS A study of algorithms for the efficient computer approximation of definite integrals by numerical quadrature, the solutions of non-linear equations and of linear systems of equations, and of the solutions of differential equations. Extensive practice in computer programming. Prerequisite: 241, 243 and Computer Science 111 or its equivalent. Offered in alternate years.
241. DIFFERENTIAL EQUATIONS An introduction to the study of differential equations and their solutions by elementary methods, series solutions and numerical algorithms. Prerequisite: 122 or 142. One-half course. See notes 2 and 4 .
243. LINEAR ALGEBRA I Vectors, linear transformations, matrices, the algebra of linear transformations and the corresponding properties of matrices. Prerequisite: 122 or 142. One-half course. See notes 2 and 4.
244. MULTIVARIABLE CALCULUS An introduction to the analysis of linear and nonlinear functions of several variables, including differentiation and integration. Taylor's theorem, the chain rule and line integrals. Prerequisite: 243. See note 2.
*321, 322. STATISTICS An introduction to the mathematical theory of probability and statistics, including a study of probability distributions and their parameters, statistical inference, tests of significance, estimation and tests of hypotheses. Prerequisite: 244 or permission of instructor. Given in alternate years.
331. OPERATIONS RESEARCH Uses of linear optimization models, solution of linear systems of equalities, the simplex algorithm, duality theory, and sensitivity analysis. The last quarter may be concerned with an additional topic such as dynamic programming or decision analysis. Prerequisites: 243 and Computer Science 111 or permission of the instructor. Given in alternate years.
332. NUMERICAL ANALYSIS Calculation of functions, interpolation and numerical intergration, solution of non-linear equation, of a linear system of equations, and of a linear system least squares curve fitting. Prerequisite: 244, 331 and Computer Science 111 or permission of the instructor. Given in alternate years.
*341, 342. MATHEMATICAL PHYSICS Advanced vector analysis and matrix methods. Ordinary and partial differential equations of physics. Initial value and boundary value problems. Green's functions, spherical harmonics, and other special methods. Prerequisites: Physics 132 or Mathematics 244.
351. ABSTRACT ALGEBRA An introductory treatment of fundamental algebraic structures such as groups, rings and fields. Prerequisite: 243 or its equivalent.
352. LINEAR ALGEBRA II An extension and deeper treatment of the material in 262. Vector spaces, linear transformations, matrices, elementary canonical forms, inner product spaces and operators on inner product spaces. Prerequisite: 243 or its equivalent.
361. ANALYSIS I An exact treatment of the real numbers, convergence, continuity, differentiation, integration and infinite series. Prerequisite: 244.
362. ANALYSIS II Studies in analysis. Topics to be chosen according to the interest of the students and instructor. Prerequisites: 244 and permission of the instructor.
372. COMPLEX ANALYSIS An introductory study of functions in the complex plane. Topics will include: complex numbers and functions; the theory of differentiation and integration of complex functions; sequences and series of complex functions; Cauchy's integral theorem; the Residue Theorem; conformal mappings. Prerequisite: Permission of the instructor.

401, 402. SPECIAL TOPICS Topics to be announced when offered. Prerequisite: permission of the instructor. One-half or one course.
461. TOPOLOGY An elementary study of metric and topological spaces touching upon open and closed sets, compactness, and connectedness. Prerequisite: permission of the instructor.

MAJOR: ten courses in mathematics including at least one of 351 or 352 , at least one of 361 or 362 and at least three other courses numbered above 300. In addition Computer Science 111 or its equivalent is required.
MINOR: six courses.
NOTE 1: It is recommended that every mathematics major:
a. Continue the study of physics;
b. Satisfy the language requirement in German, French, or Russian;
c. Take courses in philosophy, particularly Symbolic Logic and Philosophy of Science.

NOTE 2: Because of the similarity in course content, students will receive graduation credit for only one of $121,131,141,151$; only one of $122,132,142,152$; only one of $231,244,251$; only one of 252,241 and only one of $243,262$.

NOTE 3: Prospective majors in biology, economics or other social sciences should enroll in 121, 122 (as opposed to 141,142 ). Prospective majors in mathematics, physics or chemistry should enroll in the 141, 142 calculus sequence.

NOTE 4: 241 will be offered in the first half of the fall semester; 243 will be offered in the second half of the fall semester.

## MILITARY SCIENCE

## Lieutenant Colonel Johnson, Chairman <br> Majors Galbraith, Fletcher and Captain Gibson

The Department of Military Science adds another dimension to a Dickinson College liberal arts education by offering courses which develop a student's ability to organize, motivate, and lead others. Distinction should be made between the Department's course offerings, which are open to all students for credit towards graduation, and the Army Reserve Officers' Training Corps (ROTC) Program.

There is no military obligation connected with enrollment in a departmental course or the first two years of the ROTC program. Selected men and women who wish to continue the program beyond the Sophomore year (the Junior and Senior years are known as the Advanced Course) agree to a military service obligation. The program itself, the myriad options, and the extent of service obligation should be investigated on an individual basis; in general, however, the active service obligation is normally two years but may be for as little as
three months (scholarship winners and winners of Regular Army Commissions incur longer obligations). ROTC graduates are commissioned as Second Lieutenants in the U.S. Army, the Army Reserve, or the National Guard (of your state) and are assigned responsible positions dealing with one of the Army's 45 officer occupational specialties. These assignments are based on personal preference, and educational background and performance. Officers may obtain delays for graduate study and/or qualify for graduate study at government expense.

FINANCIAL ASSISTANCE: Books and equipment for Military Science courses and the ROTC program are provided free of charge to all students. All Juniors and Seniors in the ROTC program (Advanced Course) and scholarship cadets are paid a tax free subsistence allowance of $\$ 100$ a month and receive certain other benefits.
PHYSICAL EDUCATION CREDIT: A maximum of three physical education units (six required for graduation) may be satisfied by participation in Military Science Leadership Laboratory (MS 101-102 and 201-202).
SCHOLARSHIPS: Army ROTC scholarships based on merit are available. Recipients receive full tuition, academic fees, book and supply expenses (not room and board), and a $\$ 100$ per month subsistence allowance. High school seniors may apply for 4 year scholarships, and cadets enrolled in the program may compete for three year (starts in Sophomore year), two year (starts in Junior year) and one year (starts in Senior year) scholarships. Information may be obtained from high school counselors, any Army ROTC Professor of Military Science, or any Army installation. Recipients agree to a 4 year active service obligation.
NON-DICKINSON STUDENTS: Students pursuing a baccalaureate or advanced degree program at area colleges and universities are eligible to crossenroll as part-time students at Dickinson College for the purpose of taking Military Science courses or for joining the ROTC program. Area schools have transfer procedures which allow full or partial credit toward graduation for Military Science courses taken at Dickson. Contact this department for further information.

ROTC PROGRAM LENGTH: Although originally designed for the four academic years of the baccalaureate candidate, it may be reduced by:
a. Acceleration and Compression-A student may enter the program during the latter portion of the freshman year, or later. Completion of required courses takes three years (six semesters or their equivalent, to include summer sessions).
b. Basic Camp and Advanced Placement-By attending a six-week summer program a student may qualify for Advanced Course enrollment with remaining work to be completed in two years. Students who have prior
military training through active service, high school or college ROTC, or at a service academy, may be granted advanced placement of up to three years, allowing program completion in one year.

The ROTC Porgram has two components for completion.
a. Academic Component: Within the framework of a cadet's baccalaureate degree program and requirements, he or she must demonstrate a competence in the general areas of: the behavioral sciences; written and oral communication skills; American history; management studies; political power (domestic or international); and the contemporary American scene. These requirements are fulfilled through a combination of Military Science departmental academic offerings and courses from other departments. Cadets are afforded a great deal of flexibility in meeting them, and in many instances use courses from their chosen major or minor fields in place of or to supplement a Military Science academic course.
b. Military Skills Component: A cadet must satisfactorily complete a Leadership Laboratory sequence tailored to individual needs, and attend an Advanced Camp over the summer between the Junior and Senior years.
LEADERSHIP LABORATORY: The laboratory's primary purpose is to provide an understanding of the fundamental concepts and principles of military art and science and to develop leadership and managerial potential. Emphasis is on leadership training, consisting primarily of situations and experiences in relating to a group of the same age bracket. The laboratories progress from individual skills and basic organizational concepts, through small group operations and leadership to staff level planning and decision making. While integral to the ROTC program, Leadership Laboratory is open to all students, and satisfies half of the college's physical education requirements (three semesters).
ADVANCED LEADERSHIP PRACTICUM: A six-week summer program at an Army installation provides practical instruction which stresses problem analysis, decision making and leadership experiences; challenges the individual both mentally and physically; and introduces the cadet to some phases of Army life. It is normally attended between the Junior and Senior years. A voluntary alternative is the Army's Ranger course. Cadets may also volunteer for the Airborne course and become qualified parachutists. Pay for these training courses is at the rate of one-half the pay of a second lieutenant plus travel expenses, meals and medical care.

FLIGHT TRAINING: Qualified senior year cadets may apply for an all expense paid program leading to a civilian pilot's license.

Departmental Courses:
101, 102. INTRODUCTION TO MILITARY SCIENCES (Leadership Laboratory) Instruction in individual skills and the foundation for more advanced
laboratories. Meets two hours per week in each semester. (One semester's credit for physical education will be received for each semester successfully completed up to three semesters.)

FLIGHT TRAINING: Qualified senior year cadets may apply for an all expense paid program leading to a civilian pilot's license.

## Departmental Courses:

101, 102. INTRODUCTION TO MILITARY SCIENCE (Leadership Laboratory) Instruction in individual skills and the foundation for more advanced laboratories. Meets two hours per week in each semester. (One semester's credit for physical education will be received for each semester successfully completed.)
111. AMERICAN MILITARY HISTORY From colonial times to the present, with emphasis on the interrelationship of factors which contribute to the development and utilization of the U.S. Military. One-half course credit.
201, 202. APPLICATION OF MILITARY SCIENCE (Leadership Laboratory) Participation in operations and basic tactics to demonstrate leadership and management problems, and to illustrate various processes of resolution. Meets two hours per week in each semester. (One semester's credit for physical education will be received for each semester successfully completed up to three semesters).
211. ORGANIZATION AND MANAGEMENT Concepts of organization theory and the principles of management. Management and leadership relationships are investigated as they apply to the general theory and practice of the management functions of planning, organizing, staffing, direction, coordination, control, innovation and representation. One-half course credit. Prerequisite: Open only to Advanced Course and scholarship cadets.
301, 302. ADVANCED APPLICATION OF MILITARY SCIENCE (Leadership Laboratory) Emphasis is on leadership. Situations require direct interaction with other cadets (students) and faculty members. The participants set well defined goals and develop procedures for goal attainment. Meets two hours per week in each semester. (One semester's credit for physical education will be received for each semester successfully completed up to three semesters.)
321. LEADERSHIP AND MANAGEMENT Principles and techniques of effective leadership, methods of developing and improving managerial abilities and leadership qualities, and a basic understanding of interpersonal interactions. Use is made of recent developments in the administrative and the behavioral sciences to analyze the individual, group and situational aspects of leadership, and the management of resources. One course credit. Prerequisite: Open only to Advanced Course cadets.
401, 402. COMMAND AND STAFF (Leadership Laboratory) Emphasis is placed on developing planning and decision making capabilities in the areas of military operations, logistics and administration. Meets two hours per week in each semester. (One semester's credit for physical education will be received for each semester successfully completed.)
431. CONTEMPORARY PROBLEMS SEMINAR Seminars in selected areas emphasizing the interplay of multifarious considerations in exploring the environment of the contemporary American scene, and the position of the United States in the world. Normally seminars will be offered in two major areas:
a. Civil-Military Relations-Examines the contemporary United States as it relates to the decision making process affecting the U.S. military establishment. Emphasis is on the interdependence of military, social, legal, and ethical considerations in forming policies, as well as the interchange of influence; the military on society and society on the military. Normally, three problems are examined; these change by semester. Professors from other departments participate as discussion leaders. One course credit. Prerequisite: Open only to Advanced Course cadets.
b. Comparative National Security Policies-Examines the national security policies and postures of the United States, Soviet Union, Peoples Republic of China, and selected other nations. Emphasis is placed on discovering (through independent study, discussion, and common readings) the features common to all major powers so their differences can be better understood. One course credit. Prerequisite: Open only to Advanced Course cadets.

## MUSIC

Associate Professors T. Bullard and Posey
Assistant Professor Petty, Chairman
Instructors in Applied Music - B. Bullard, Diehl, Jaynes, Mathews, M. Park, and P. Park

Courses in music are offered in the belief that music is an essential aspect of man's personal, social, and cultural evolution, being manifestations and reflections of the best thought throughout the ages. The art of music is considered in terms of its participation in the intellectual and spiritual life of man. Instruction in music is available both to students whose interest is of a general nature and to those who anticipate graduate or professional study. The offerings of the department are designed to enable students to follow a balanced and coordinated program of study in the basic disciplines of music through training in music theory, acquaintance with music's history and literature, performing experience through participation in vocal and instrumental ensembles, and individual instruction in applied music.

101, 102. HISTORY OF MUSIC An introductory course in music designed to train students in intelligent listening through discussion and analysis of selected representative works from plainsong through contemporary music. The primary objective of the course is to provide the student with such knowledge and understanding that may lead to an intelligent lifelong interest in music.

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113-114. APPLIED MUSIC INSTRUCTION I Open to all students who demonstrate by audition some acquaintance with musical notation, and who should continue to study instrument or voice at the basic level. One-half or one course each semester. Placement by audition. Does not fulfill distribution requirements.
*205, 206. INTRODUCTION TO THE THEORY OF MUSIC A survey of the elementary materials of music. The student is acquainted with some fundamental means of organizing these materials through firsthand contact with simple problems in melodic, contrapuntal, and harmonic techniques. Prerequisite: permission of the instructor.

213,214. APPLIED MUSIC INSTRUCTION II Open to students who demonstrate by audition a basic technique, and who should continue instruction on the intermediate level. May be repeatedfor credit with the permission of the instructor. One-half or one course each semester. Placement by audition. Does not fulfill distribution requirements.
*225, 226. HARMONY An introduction to the basic elements of harmony by means of discussion, analysis, and written exercises, complemented by intensive drill in sight singing, ear training, and keyboard harmony. Prerequisite: permission of the instructor.
301. TWENTIETH-CENTURY MUSIC A survey of the major trends in music during the twentieth century. Open to sophomores with the permission of the instructor. Given in alternate years.
302. HISTORY OF OPERA A survey of operatic literature from its inception to the present. Open to sophomores with permission of the instructor.
303. INSTRUMENTAL MUSIC A discussion of selected topics in instrumental music, e.g., symphonic literature, chamber music, and keyboard literature. The content of the course will be altered from year to year in order to provide a diversity of subject matter. Open to sophomores with permission of the instructor.
304. VOCAL MUSIC A discussion of selected topics in vocal music, e.g., choral literature and history of the art song. The content of the course will be altered from year to year in order to provide a diversity of subject matter. Open to sophomores with permission of the instructor.
305. BIOGRAPHICAL STUDIES A study of the life and works of a major composer, e.g., Bach, Beethoven, Mozart, or Bartók. The content of the course will be altered from year to year in order to provide a diversity of subject matter. Open to sophomores with permission of the instructor.

313, 314. APPLIED MUSIC INSTRUCTION III Open to students who demonstrate by audition a fully developed technical skill and who should continue study on the advanced level. May be repeated for credit with the permission of the instructor. One-half or one course each semester. Placement by audition. Does not fulfill distribution requirements.


345, 346. COUNTERPOINT Study of the contrapuntal practice of several polyphonic periods, emphasizing analysis and written exercises. Prerequisite: 226.
351. SEMINAR IN MEDIEVAL AND RENAISSANCE MUSIC Study of the principal styles and forms of music from plainsong to ca. 1600. Given in alternate years. To be offered in 1976-1977. Prerequisite 226.
352. SEMINAR IN BAROQUE MUSIC Study of the principal styles and forms of music from 1600 to 1750. Given in alternate years. To be offered in 1976-1977. Prerequisite: 226.
353. SEMINAR IN CLASSIC AND ROMANTIC MUSIC Study of the principal styles and forms of music from ca. 1750 to ca. 1900. Given in alternate years. Prerequisite: 226.
354. SEMINAR IN TWENTIETH CENTURY MUSIC Study of the principal styles and forms of music from ca. 1900 to the present. Given in alternate years. Prerequisite: 226.

413-414. REPERTORY AND PERFORMANCE The purpose of this course is to acquaint the advanced student with a broad selection of the repertory for his voice or instrument, and to prepare him to perform a program in spring semester which demonstrates his understanding of several musical periods and styles. Prerequisite: Music 101 and 102. Music 313 and 314. Open to seniors with the permission of the Music Department upon recommendation of the instructor.

495, 496. SENIOR SEMINAR Studies in composition, music history, and advanced theory, conducted through regular conferences and assigned writing. Open to seniors majoring in music who have demonstrated their ability to pursue independent research in at least two courses from this group: 351, 352, 353, 354. Prerequisite: permission of the chairman of the department.
COLLEGE CHOIR A mixed choir open through audition to everyone in the college community. Several major choral works are performed each year at Dickinson and at other colleges. Prerequisite: permission of the director. No credit.

CHAPEL CHOIR This ensemble, carefully selected for vocal potential and musicianship, offers sacred music for the college chapel worship each Sunday and presents special programs on tour and with the College Choir. Prerequisite: permission of the director. No credit.
THE COLLEGIUM MUSICUM A small, select group of singers drawn from the student body and faculty for the purpose of studying and performing masterpieces composed for small ensembles. Prerequisite: permission of the director. No credit.

THE COLLEGE-COMMUNITY ORCHESTRA Open to students at the college and to instrumentalists from the surrounding area interested in the performance and study of the best in orchestral literature. Prerequisite: permission of the director. No credit.

MAJOR: ten courses, including 101, 102, 225, 226, 345, 346, and four additional courses from the following group: $351,352,353,354,414,495,496$, or an independent study approved by the department. Proficiency in piano is required.

MINOR: six courses, including 101, 102, or 205, 206, and 225, 226 and two additional courses from the following group: $345,346,351,352,353$, and 354.

NOTE: Students planning to major in music should complete 225-226 during their sophomore year. A knowledge of French and German is necessary for graduate study in music.

## PHILOSOPHY

## Professors Allan and Ferré Assistant Professor Dwiggins, Chairman

Courses in philosophy teach students how to think critically and coherently about fundamental problems. Important answers to such problems are examined both for their historical importance and for their value in aiding each student to form his or her own ideas. The program provides a balanced approach to (1) experience of the philosophic tradition as embodied in its great documents, both classical and contemporary; (2) knowledge of and practice in the analysis and criticism of assumptions, methods, and opinions; and (3) the attempt to pass beyond criticism to original constructive thought. Majors in philosophy are offered a central liberal education which, in addition to its intrinsic value, can provide, with appropriate related work, excellent preparation for graduate study and teaching in several fields and a rigorous humanistic background for careers in law, education, medicine, or other positions involving policy-making, public service, or a systems-oriented approach to problems.
111. PROBLEMS OF PHILOSOPHY An introduction to philosophy through a critical examination of key problems such as the nature of knowledge, the criteria for truth, the relation of mind and body, the existence and nature of God, the basis of moral judgments, and the nature of art. The problems will be presented through selected primary sources.
121. GENERAL LOGIC An introduction to philosophy through an examination of the principles and conditions of correct thinking. Through a study of selected philosophical and everyday arguments, attention is focused on the relation of language to facts and concepts, the criteria of valid reasoning, and the detection of fallacies. The Aristotelian syllogism will receive special attention.
122. SYMBOLIC LOGIC An introduction to formal logic, emphasizing techniques of natural deduction; includes propositional and predicate (quantificational) logics, logic of relations, and axiomatic formal systems. Usually offered as a self-instructional tutorial, but may also on occasion be offered in a more traditional class format.
132. ETHICS An introduction to philosophy through a critical examination of the major ethical theories, with emphasis on the attempt to determine the status of moral values as objective or subjective, absolute or relative.
230. PHILOSOPHY OF RELIGION An attempt to understand religion through the application of philosophic methods, including a critical examination of possible solutions to some persistent religious problems such as the existence of God, religious knowledge, the problem of evil, free will, and immortality. Prerequisite: any 100-level course, major standing in religion or permission of the instructor.
231. PHILOSOPHY OF ART A philosophical investigation of the meaning of art, including a critical examination of important modern and classical theories. Prerequisite: any 100-level course or permission of the instructor.
232. PHILOSOPHY OF SOCIETY An investigation into the ontology of history and society. Topics may include the conflict between freedom and order, the social nature and justification of values, the philosophy of dialectical materialism and its critics. Prerequisite: any 100-level course, major standing in the social science division or permission of the instructor.
233. PHILOSOPHY OF SCIENCE An attempt to understand sciences as one of mankind's great intellectual creations. Emphasis is placed on the conceptual structures and methods used in scientific thinking, the relations between the particular sciences, and the logical character of scientific laws, theories, and presuppositions. General questions about knowledge, values, and ultimate beliefs are also explored in relation to the procedures and findings of the sciences. Prerequisite: any 100-level course or major standing in the natural sciences or psychology or permission of the instructor.
241. ANCIENT AND MEDIEVAL PHILOSOPHY From Hesiod to Ockham. An interpretation of the development of Western Philosophy from its roots in mythic consciousness, with emphasis on the interplay of language and experience in Greek thought and the role of reason in the medieval synthesis. Primary sources include texts from the Presocratics, Plato, Aristotle, and Aquinas. Prerequisite: any 100 -level course or permission of the instructor.
242. SEVENTEENTH AND EIGHTEENTH CENTURY EUROPEAN PHILOSOPHY From Galileo to the French Revolution: Europe's attempt to come to terms with the new science and with the newly emerging bourgeois nations. The leading ideas in the century of genius and the age of enlightenment, with particular emphasis on the problem of attaining certain knowledge and a just society. Primary sources include: Descartes, Spinoza, Locke, Leibniz, Berkeley, Hume, and Kant. Prerequisite: any 100-level course or permission of the instructor.
243. AMERICAN PHILOSOPHY Philosophies shaping and shaped by the beliefs and practices of the American peoples. Puritans; federalists and Jeffersonians; transcendentalists; the Ohio and St. Louis Hegelians; social darwinists; pragmatists; process thinkers; linguistic analysts. Ordinarily offered in alternate years. Prerequisite: any 100-level philosophy course.
244. ORIENTAL PHILOSOPHY A study of selected philosophical traditions and thinkers of the Orient. Examples will be chosen with the intent to illustrate and clarify the major problems and characteristics of Oriental philosophy. Prerequisite: 100-level philosophy course, or permission of the instructor.
341. NINETEENTH CENTURY WESTERN PHILOSOPHY A critical examination of the development of philosophical thought in the nineteenth century, with special attention to the European tradition from Hegel to Nietzsche. Ordinarily offered in alternate years. Prerequisite: 241 and 242, or permission of the instructor.
342. TWENTIETH CENTURY WESTERN PHILOSOPHY A study of the present philosophical situation with emphasis on recent forms of pragmatism, analysis, existentialism, and process thought. Prerequisite: 241 and 242 , or 341 , or permission of the instructor.
352. THEORIES OF KNOWLEDGE Advanced studies in various theories of knowledge, with emphasis on contemporary expressions of great historical traditions. Offered in alternate years. Prerequisite: Philosophy 230, 231, 232, or 233.
353. THEORIES OF VALUE Advanced studies in aesthetic, ethical, and religious phenomena, and the values they are asserted to embody. Offered in alternate years. Prerequisite: Philosophy 230, 231, 232, or 233.
354. THEORIES OF REALITY Advanced studies of various theories of ultimate reality, with emphasis on modern expressions of great historical traditions, including views on the nature of the metaphysical enterprise itself. Offered in alternate years. Prerequisite: Philosophy 230, 231, 232, or 233.
355. THEORIES OF HISTORY An inquiry into the speculative philosophies of history which have significantly influenced the shape of Western thought; an analysis of their nature and methodological principles; an evaluation of their scope, function, and legitimacy. Offered in alternate years. Prerequisite: Philosophy 230, 231, 232, 244, or a major in History.
391. SEMINAR A reading and conference course in advanced topics in philosophy. Prerequisite: permission of the chairman of the department.

SYMPOSIUM Occasional informal discussions on selected topics of mutual interest, led by faculty members or students. Open to majors in philosophy, and to others by invitation. Not offered for credit.

MAJOR: nine courses including either 121 or $122 ; 241 ; 242$; and at least four 300level courses.

MINOR: six courses.

## PHYSICAL EDUCATION

Associate Professors DuCharme, Chairman, Eavenson, Gobrecht, Seibert, and Watkins**
Assistant Professors Barber, Nickey, Johnston, and Wagner
Instructor Spitt
All fully matriculated Dickinson College students must satisfactorily complete three semesters (six units) of physical education. Transfer students with junior standing and with no physical education credit are required to take only two semesters (four units) of physical education. Students are expected to have completed the physical education requirement by the end of the first semester of their senior year.

A student enrolled in the physical education program may receive no more than two physical education credits for the same activity. In most activities students will be given the opportunity to take a physical education skills and knowledge achievement test. A student passing the test will be granted credit for that activity. A maximum of three physical education units may be satisfied by participation in intercollegiate athletics and/or Military Science leadership laboratory. Participation in a sport season or in a semester of leadership laboratory will receive one activity unit credit. Since the physical education requirement is designed to teach a diversity of lifetime activities, a student receiving intercollegiate athletic credit or military science credit must enroll in physical education activities that are different from his intercollegiate sports or leadership laboratory experience.

Every student must register for Physical Education. If there is a medical reason why the student cannot participate in Physical Education, he or she must submit a medical excuse signed by the family doctor or one of our College doctors stating specific dates for the length of the excuse. Those students must register under the Medical Classification.

All Physical education activities offered to Dickinson College Students are classified at two levels: basic activities and advanced activities.

The basic physical education activities offered by the Department of Physical Education are listed below:
A. Tennis
B. Golf
C. Archery
*D. Volleyball
E. Swimming
F. Squash Racquets
G. Bowling
*H. Weight Training
*I. Karate
J. Skiing
K. Badminton
*L. Horseback Riding
M. Gymnastics
N. Handball
O. Racquetball
*P. Marksmanship I
*Q. Orienteering I
*R. Others upon formal request

[^3]The advanced physical education activities offered by the Department of Physical Education are listed below. Any student who passes the basic level physical education skills and knowledge achievement test may enroll in the advanced area.
*A. Tennis
*B. Golf
*C. Archery
*D. Volleyball
*E. Swimming
*F. Squash Racquets
*G. Karate
*H. Skiing
*I. Badminton
*J. Water Safety Instructor
*K. Senior Life Saving
*L. Gymnastics
*M. Intercollegiate Athletics
*N. Marksmanship II
*O. Orienteering II
P. Others upon formal request

* Not granted credit by examination.


## PHYSICS AND ASTRONOMY

## Professor Long

Associate Professors K. Laws, P. Laws, Luetzelschwab, Smith, and Wolf, Chairman
Assistant Professor Deutschman
The program in physics and astronomy serves both those who desire intensive training in physical science and those who have an interest in science as an important part of a liberal education. It aims to give the student an insight into the fundamental laws of nature and some facility in the mathematical language in which they are expressed. Students may major in physics as a preparation for further professional study in physics or engineering, for secondary school science teaching, or for other careers in which a background in physical science is valuable.

Prospective majors in physics and engineering should take Physics 131, 132 and Math 141,142 in their freshman year. Students who have taken advanced placement examinations should consult the chairman of the department regarding appropriate placement. Physics 111,112 is primarily for premedical students and for non-science students electing physics to satisfy the one year laboratory science distribution requirement.
102. METEOROLOGY The physical basis of modern meteorology: characteristics of atmospheric motions, clouds, and weather systems; methods of weather observation and forecasting; meteorological aspects of air pollution. Satisfies the one course distribution requirement in Division III, but may not count toward a physics major. (See also Physics 202.)

107, 108. ASTRONOMY Introduction to the modern concepts of the physical nature of the astronomical universe. First semester: historical development of astronomical ideas and origin and evolution of the solar system. Second semester: cosmology and the structure and evolution of the stars and galaxies. A terminal non-laboratory course for non-science students. Three hours classroom. 107 and 108 will not count toward major requirements on physics and will not satisfy the one year laboratory science distribution requirement. Either course will, however, count as the third required course in Distribution III. Please read Note 1.

109, 110. ASTRONOMY Similar to 107, 108 except that it includes one twohour laboratory a week. This course sequence will not count towards major requirements in Physics. Please read Note 1.
*111, 112. ELEMENTARY PHYSICS Mechanics, heat, sound, light, electromagnetism and selected topics in modern physics. This course is intended primarily for B.A. and pre-med students. Three hours classroom and one two-hour laboratory a week. Please read note 2.
*131, 132. GENERAL PHYSICS I A more analytical study than Physics 111, 112, making use of the elementary calculus, designed for mathematics and physical science majors. During the first semester special emphasis is placed on particle mechanics, conservation principles, rotational dynamics, wave motion and sound, heat and thermodynamics. The second semester topics include basic concepts in electricity and magnetism, and physical optics. Three hours classroom and one three-hour laboratory a week. Prerequisite: Mathematics 121, 122 or 141, 142 or concurrent registration therein. Please read note 2.
202. METEOROLOGY The physical basis of modern meteorology: characteristics of atmospheric motions, clouds, and weather systems; methods of weather observation and forecasting; meteorological aspects of air pollution. Some of the basic concepts and techniques of introductory physics will be used to solve problems in meteorology. This course may count toward a physics major. Prerequisite: Physics 111 or 131.
206. TOPICS IN ASTRONOMY A study of the physical and mathematical tools used in obtaining knowledge of the universe either within or beyond the limits of the solar system. Three hours classroom a week. Prerequisite: 112 or 132; Mathematics 122 or 142.
231. MODERN PHYSICS Special relativity. Atomic structure and its relationship to the properties of matter. Selected topics in nuclear physics, elementary particle theory, and solid state physics. Prerequisite: 112 or 132.
232. THE PHYSICS OF WAVES A study of the motion of waves and vibrating systems. Resonance phenomena, coupled oscillation, super-positions, and interference. Wave theory will be used to describe various phenomena in fluids, acoustics, optics, mechanics, and modern physics. Prerequisite: Physics 112 or 132; Mathematics 122 or 142 .
235. MODERN PHYSICS LABORATORY Experiments in modern physics, including atomic spectroscopy, x-ray diffraction, nuclear spectroscopy and instrumentation. Four hours laboratory a week. Prerequisite: 231 or concurrent registration therein. One-half course.
236. MODERN OPTICS AND ACOUSTICS LABORATORY Experiments involving wave phenomena in such fields as fluid mechanics, acoustics, modern optics and holography, with the use of lasers, microwaves, spectroscopy and photography. Four hours laboratory a week. Prerequisite: 232 or concurrent registration therein. Onehalf course.
*311, 312. ANALYTICAL MECHANICS AND WAVE MOTION Elementary vector analysis, statics. Particle mechanics including central field motion, free and forced harmonic oscillations including damping; rigid body mechanics with an introduction to advanced dynamics. Elastic waves and wave motion. Three hours classroom a week. Prerequisite: 132 or 112 with permission of the chairman of the department; Mathematics 252.
*331, 332. ELECTRICITY AND MAGNETISM Basic laws of electricity and magnetism. Properties of the edectromagnetic field, interaction of the field with charges and currents, dielectric and magnetic media. Solutions of Maxwell's equations in matter and free space, reflection and refraction of waves, and guided waves. Laboratory work as appropriate in 332. Prerequisite: 132 or 231; Mathematics 231.
*341, 342. MATHEMATICAL PHYSICS Advanced vector analysis and matrix methods. Ordinary and partial differential equations of physics. Initial value and boundary value problems. Green's functions, spherical harmonics, and other special methods. Prerequisite: 132; Mathematics 252.
351. EXPERIMENTAL PHYSICS Physical electronics: emphasis is placed on the models of semiconductor processes, and on semiconductor devices and circuits. Two hours classroom and one four-hour laboratory a week. Prerequisite: 132 or 112; Mathematics 122 or 142.
361. TOPICS IN MODERN PHYSICS Topics in physical optics, atomic and nuclear physics, modern acoustics, or other fields of modern physics according to the interests and needs of students. Prerequisite: 232, Mathematics 251, or permission of the instructor.
362. THERMODYNAMICS AND STATISTICAL MECHANICS Classical and quantum statistical mechanics and thermodynamics with applications to the solid state and other physical systems. Prerequisite: 232, Mathematics 231, or permission of the instructor.

391, 392. PHYSICS SEMINAR Study and discussion of topics in modern physics of mutual interest to physics majors. One meeting per week. Prerequisite: 232 and permission of the instructor. One-half course.

431, 432. TOPICS IN THEORETICAL PHYSICS Topics to be selected from the following areas: advanced dynamics, special and general relativity, applications of quantum mechanics to atomic, nuclear, and solid state physics. Prerequisite: 311, 341, or permission of the instructor.

MAJOR: nine courses, including 231, 232, 311, and 331. Physics 351 is recommended.

MINOR: six courses including Physics 111, 112 and four addtional courses in the department.

NOTE 1: Because of the similarity in course content, students will not receive graduation credit for both 107 and 109 or for both 108 and 110 .

NOTE 2: Because of the similarity in course content, students will not receive graduation credit for both 111 and 131 or for both 112 and 132.

## POLITICAL SCIENCE

Professors Andrews, Flaherty, Chairman, Nilsson, and Rosi*
Associate Professor Nicoll*
Assistant Professor Ruhl
Instructors Entman, Friedman, and Wyszonirski
The Department of Political Science uses theoretical, empirical, and normative methods to analyze political systems and processes. Together with the mastery of facts, such analytical habits should equip students-whether their future goals are law or graduate school, government service, business, or jour-nalism-to form and sustain considered views, to recognize biases in themselves and others, and to make judgments based on something more enduring than current fashion.
101. INTRODUCTION TO POLITICAL SCIENCE An introduction to some of the major areas, and problems and alternative perspectives of the discipline. Intended as a general introductory course in politics for those who do not intend to major in political science.
201. INTRODUCTION TO POLITICAL PHILOSOPHY A course in political ethics which acquaints the student with the importance of analytical and normative political thought by focusing on particular issues or concepts in political philosophy. Required of all Track 1 majors.
211. AMERICAN GOVERNMENT A basic introductory course in American federal government which emphasizes its structure and operation, as well as modern methods of analysis. Special attention is given to the executive, legislative, and judicial processes. Required of all Track 1 majors.

[^4]230. THE CITY Major concerns are the city as a frontier, the city as people, the city as plan, problems of urban politics, problems of society.
240. INTERNATIONAL RELATIONS The distribution of power among nations, the components of that power, the tools available for its pursuit and the use made of them are the major divisions of this course. Required of all Track 1 majors.
243. STATE AND LOCAL GOVERNMENTS A study and analysis of state and local governments with particular emphasis on administrative problems. Attention is given to pressures exerted on community leadership and the influence of bureaucracies in various important areas of public policy including criminal justice, growth and planning, corruption, corporate power, poverty and mental health politics.
290. POLIMETRICS AND RESEARCH A survey of quantitative and other techniques used in political and social research. Students learn to use documents and to perform content analysis and to employ various statistical skills. They will also use legal research techniques and material. The course is offered by the department collectively with one professor designated as course coordinator. The course is strongly recommended for pre-professional students and for prospective graduate students in the social sciences.
335. PUBLIC ADMINISTRATION An analysis of the organization and functioning of the national bureaucracy in the light of the problem of executive responsibility in a democratic society. Special attention is given to the office of the Presidency, theories of organization, independent regulatory agencies and bureaucratic pathology, financial and personnel administration. Prerequisite: 211 or permission of the instructor.
341. AMERICAN POLITICAL THOUGHT The development of political ideas in America, stressing foreign influences on early colonial thought and those influences indigenous to the growth of American democracy. Colonial political ideas, the development of the Constitution, the Federalist Papers, state rights philosophy versus centralized government and contemporary interpretations are other questions dealt with. Prerequisite: an introductory course in political theory or permission of the instructor: History 217, 218 is recommended.
345. CONSTITUTIONAL LAW I An analysis of the Constitution as the fulcrum of the political system and as the ultimate legitimizing instrument available to political forces competing to adapt the legal order to their fundamental needs. Special attention is given to the role of the Supreme Court and the process of judicial review. Prerequisite: 211 or permission of the instructor.
346. CONSTITUTIONAL LAW II Stresses trends and developments in civil liberties, with particular emphasis on the Supreme Court's interpretation and application of the "equal protection" and "due process" clauses of the Fourteenth Amendment from the early 1950's to the present. Individually-selected special topics will be used as an integral part of the course. Prerequisite: 211 or permission of the instructor.
347. POLITICAL MODERNIZATION Peasant communism, urban liberalism and national fascism are studied as alternative responses to traditional authority's breakdown under the stress of social change. The limits and utility of each are examined through the experience of selected nations. Prerequisite: 240 or permission of the instructor.
348. ASIAN GOVERNMENTS AND POLITICS Comparison of the People's Republic of China, India and Japan: ecology, traditional cultural themes, the great issues of politics, the modernization process, international relations.
350. INTERPRETATION OF COMMUNIST THEORY An examination of the political philosophy of Karl Marx, Lenin, Trotsky, and others within the tradition of Marxist scholarship and politics. Prerequisite: Political Science 201 or permission of the instructor.
353. EVOLUTION OF POLITICAL THOUGHT An analysis of the political ideas of selected Western and non-Western cultures exhibiting pre-industrial socioeconomic conditions. Emphasis will be placed upon recurrent themes and issues in political life and the contemporary relevance of pre-industrial thought to current politics and social philosophy. Prerequisite: Political Science 201 or permission of the instructor.
354. RECENT POLITICAL THOUGHT An analysis of the political doctrines of industrialized cultures. Mercantile liberalism, nationalism, colonialism, fascism are among the concepts examined. Prerequisite: Political Science 201 or permission of the instructor.
355. POLITICAL BEHAVIOR Cultural, social, and psychological factors which contribute to forms and directions of political behavior. Special attention is given to American voting behavior, ethnic political behavior, and personality influences on politics. Field surveys are undertaken to illustrate contemporary trends. Prerequisite: 211 and one course in psychology or sociology, or permission of the instructor.
356. PUBLIC OPINION AND PROPAGANDA The nature, formation, and manipulation of public opinion in a democratic society. Included are an analysis of mass communication (press, television, and film) from the McLuhan and behavioral perspectives, propaganda techniques and effects in both democratic and authoritarian societies, and problems of public opinion polling. Prerequisite: 211 and one course in sociology, or permission of the instructor.
357. POLITICAL PARTIES AND INTEREST GROUPS A study of the functions, structures, and operations of American political parties and interest groups. Prerequisite: 211 or permission of the instructor.
358. THE LEGISLATIVE PROCESS An analysis of the legislative branch of government, especially the national Congress. Emphasis is placed upon the legislature as a social system, the decision-making process, the interrelationships with the political parties and interest groups, the executive and the judiciary. Prerequisite: 211 or permission of the instructor.

359. THE AMERICAN PRESIDENCY An in-depth analysis of the nature and significance of "the Man" and "the Office," including constitutional development, presidential roles and customs, the recruitment process, the executive branch, and the politics of the presidency. Prerequisite: 211 or permission of the instructor.
360. COMPARATIVE POLITICAL INSTITUTIONS European parliamentary institutions are analyzed as alternative liberal-democratic systems. Particular attention is paid to the British Cabinet form, the French Presidential form, the Italian Coalition form, and to the German Federal form. Prerequisite: 240 or permission of the instructor.
363. THE BLACK EXPERIENCE IN THE AMERICAN POLITICAL SYSTEM A survey course analyzing the experience of Black people in the American political system. Contemporary political issues confronting the Black community will be discussed in the light of its history and the nature of the American political system. Given in alternate years. Prerequisite: 211 or permission of the instructor.
366. SOVIET AND EAST EUROPEAN POLITICS An analysis of the development, structure and issues of Soviet and East European politics.
370. FORMULATION OF AMERICAN FOREIGN POLICY An analysis of the methods by which foreign policy is formulated and executed as well as the study of American programs and problems in the major areas of the world. Policies concerning disarmament, economic and military aid, and the United Nations are also considered. Prerequisite: 240 or permission of the instructor.
375. AMERICAN NATIONAL SECURITY POLICY The objective of the course will be to analyze the formulation and implementation of American national security policy within the context of American society and the international system. National Security will not be considered simply in a military/strategic sense but as connoting the preservation of the core values of a society. Prerequisite: 240 or 211 or permission of the instructor.
390. SELECTED TOPICS IN POLITICALSCIENCE Topics not normally studied in depth in the foregoing course offerings are analyzed in this special topics class. At the discretion of the department, a 390 Selected Topics class using seminar research procedures may be accepted as the equivalent of a 490 seminar. Open to sophomore, junior and senior majors and to others by invitation.

395, 396. STUDIES IN MODERN EUROPEAN POLITICS To be offered only in Bologna.
490. SEMINAR A seminar in selected topics in Political Science. Open to sophomore, junior and senior majors and to others by invitation.

MAJOR. Three tracks are available to the Political Science major.
Track 1 is made up of nine courses including 201, 211, 240 and a 490 seminar. The introductory courses in the fields of theory, American government and foreign government and international relations are prerequisites to advanced work in those component fields.

Track 2 allows the major to select any nine courses (including a 490 seminar) with the approval of two departmental advisors.

Track 3 is the tutorial major meant for the clearly superior student who is interested in acquiring a comprehensive familiarity with the literature of the field of Political Science.

## MINOR: SIX COURSES

TUTORIAL MAJOR: The student works primarily under the guidance of one member of the department by mutual agreement. Together, they devise a program of study which involves, minimally, regular meetings for the writing of essays and papers and for discussion. The fields of Political Science to be dealt with are agreed upon by the department in conjunction with the tutor and the student at the time the program is initiated.

Normally the program begins no sooner than the student's third semester.
There is no interference with College distribution requirements or with taking non-Political Science courses.

The student is free to take one or some courses in Political Science; to take them as audits, pass/fail, or for a letter grade. The only specific Political Science course requirement in this major is a 490 seminar in order that the student have the experience of working with his peers on a jointly researched topic.

The student portfolio will contain samples of essays and other work and evaluations by the tutor and by other instructors as appropriate.

In the spring semester of the senior year, the student is required to sit for a comprehensive examination in both written and oral form to be administered by the department. The examination will deal with the fields of Political Science alluded to above. Changes in the fields to be included may be made with departmental approval up to and including the seventh semester. Normally, one-quarter of the final semester is given over to preparation for this comprehensive examination.

One reexamination in one or more fields may be permitted within the calendar year.

The grade assigned will be pass, fail or pass with departmental honors.
PASS/FAIL OPTIONS FOR MAJJORS (Please also see page 158).
Track 1 majors: With the exception of 201, 211, 240 and 490, any three major courses may be taken pass/fail.

Track 2 majors: With the exception of 490, any three major courses may be taken pass/fail.

Track 3 majors: The comprehensive nature of the tutorial enables the tutor and the student to plan a program following the College pass/fail requirements.

NOTE 1: Track 3 is available to members of the Class of 1977 and succeeding classes.
NOTE 2: Majors may apply to spend one semester of their junior year in Washington, D.C. in the Washington Semester at American University specializing in domestic political studies. Majors may also apply to spend their sophomore, or junior year in Bologna, Italy as participants in the Bologna Program specializing in European studies and international affairs.

# PSYCHOLOGY AND EDUCATION 

Professors Coslett, Chairman, James, and Wanner*<br>Associate Professor Hartman<br>Assistant Professors Cavenagh, Engberg, Kohut<br>Instructors Austin and Robertson

## Psychology

The emphasis of the psychology program at Dickinson is the accommodation of the individual patterns of interest and objectives of the students enrolled. The curriculum includes general lecture courses to familiarize the student with major areas of psychology and courses emphasizing discussion and active student involvement. These latter courses include both laboratory and field experience under critical supervision. Their purpose is to permit the student to acquire the viewpoint of the discipline through the application of its theories and methods.

[^5]Students are encouraged to think through their purposes for choosing psychology as a major and to seek advice from a department member early in their program. To declare a major, a student must be able to demonstrate to the satisfaction of the Psychology Department that he or she has achieved a level of insight into psychological processes sufficient to indicate that advanced work in this area is warranted. The student can demonstrate his sufficiency by satisfactorily completing one course selected from the following where a minimum grade of B or recommendation by the instructor will normally be required:

> 111 Introduction to Psychology
> 132 Personality Psychology
> 140 Social Psychology

## 237 Developmental Psychology

276 Abnormal Psychology
111. INTRODUCTION TO PSYCHOLOGY A survey of the various areas of psychological study designed to acquaint students with current viewpoints, findings and techniques of investigation specific to these areas. A self-paced course consisting of twelve self-study unit assignments and tests.
132. PERSONALITY PSYCHOLOGY A survey of the major current theories of personality and the relevant empirical and clinical literature.
140. SOCIAL PSYCHOLOGY A survey of the major current theories of social behavior and the relevant findings of field and laboratory studies.
220. EXPERIMENTAL ANALYSIS OF BEHAVIOR An introduction to operant conditioning in particular and to psychological experimentation and inference in general. A self-paced course consisting of twenty unit tests, individual conferences, and five laboratory experiments. Prerequisite: 111.
221. RESEARCH DESIGN AND STATISTICAL EVALUATION An examination of statistical and non-statistical methods as they relate to the design and evaluation of experiments in the field of Psychology. This instruction to research methodology and quantitive analysis will be augmented by extensive experience with practical applications. Prerequisite: permission of the instructor.
231. EDUCATIONAL PSYCHOLOGY Also called Education 231. Psychological principles and practices are related to problems of classroom instruction. The course is of special relevance to the students who intend careers in teaching. Prerequisite: 111 and Education 221.
237. DEVELOPMENTAL PSYCHOLOGY A presentation of the principles and empirical facts of human development as related to infrahuman development and with particular attention to the methodology of empirical observation. Field studies of children supplement the classroom work.
276. ABNORMAL PSYCHOLOGY An introduction to the field which provides a valuable background for premedical students and students who contemplate careers in various social and psychological service areas. Various mental illnesses are described and techniques of diagnosis and treatment are discussed.
320. EXPERIMENTAL GENERAL PSYCHOLOGY This course explores the problems in the design, conduct, and analysis of psychological research with illustrative reference to human learning, perceptual-cognitive processes, and related areas. Students perform demonstrative experiments which exemplify some of the methodological problems normally encountered in research of this type. Two hours of classroom and four hours of laboratory a week. Prerequisite: Psychology 220 and 221.
321. ADVANCED EXPERIMENTAL CONDITIONING The principal objective of this course is to develop the critical skill of the student in relating psychological theory to empirical data. Considerable emphasis is placed on expositional writing which is subjected to intensive criticism and correction. The subject matter consists of advanced problems in operant conditioning with special emphasis on the areas of punishment, avoidance and escape. Two hours classroom and independent laboratory research. Prerequisite: 220 and 221.
326. PHYSIOLOGICAL PSYCHOLOGY The structure and function of the nervous system are reviewed with respect to their role as variables in the behavioral processes. Two hours classroom and four hours laboratory a week. Prerequisite: Psychology 220 and 221.
338. EXPERIMENTAL CHILD PSYCHOLOGY The empirical-experimental study of human development from prenatal development through adolescence. Lecture-discussion meetings are supplemented by field observation and experimentation with young children. Designed for advanced social sciences, pre-professional health sciences, and pre-law students. Two-three hours weekly in classroom with four-six hours weekly in laboratory. Prerequisite: 221 and 237.
339. PRINCIPLES OF COUNSELING The theories and techniques of counseling with emphasis upon the interdependence of educational, vocational and personal problems. Prerequisite: 111.
361. INTRODUCTION TO CLINICAL PSYCHOLOGY An overview of clinical psychology, both as an academic discipline and as a professional art and including behavioral problems encountered, their diagnosis and treatment. Prerequisite: 220 and permission of the instructor.
376. JUNIOR SEMINAR A reading and conference course on selected topics. Prerequisite: permission of the instructor.
451. HISTORY OF PSYCHOLOGY This course examines the continuous growth and interaction between thinking and empirical discovery by which the present science of psychology grew from earlier philosophies and sciences. Prerequisite: Near completion of the major or permission of the instructor.
461. PSYCHOLOGICAL TESTING The use of psychological tests and observational procedures in describing the behavioral organization of individuals. Supervised field work with children and adolescents supplements the lecture and discussion. Prerequisite: 132 or $276,237,361$ and permission of the instructor.
471. SYSTEMATIC PSYCHOLOGY I An advanced course for selected students with a strong background in experimental psychology. The sequence of topics is positivistic philosophy, review of selected topics in conditioning theory, Hull and Tolman. Prerequisite: Permission of the instructor.
472. SYSTEMATIC PSYCHOLOGY II An advanced course for selected students with a strong clinical background. The course will involve an intensive analysis and appraisal of current issues in personality theory mainly through the reading and analysis of primary source materials. Prerequisite: permission of the instructor.

481, 482. SENIOR SEMINAR Readings, reports and discussions will be employed in an examination of central problems of present-day psychology. Prerequisite: permission of the instructor.

PSYCHOLOGY INTERNSHIP A two semester program for senior majors only. One course credit per semester. Permission of the Department Chairperson required. Offered by special arrangement through the Director of Off-Campus Studies.
MAJOR: Ten courses, including 111, 220, 221, 451 and any course from the 320-338 sequence of advanced laboratory courses; and a demonstrated competency in statistics. (Usually Mathematics 221). Transfer students are expected to take at least a minimum of five courses in the Department, four of which must be in the $300 / 400$ level.

MINOR: six courses.

## Education

The teacher education program consists of (1) basic coursework, and (2) the professional semester in teacher education. Certification programs include $\mathrm{Bi}-$ ology, Chemistry, Earth and Space Science, English, French, German, Italian, Latin, Mathematics, Physics, Social Studies, and Spanish. Basic coursework consists of the following courses:

Ed. 221 -Social Foundations of Education
Psy. 111-Introduction to Psychology (will satisfy Division II-3 distribution requirement)

Psy. 231 -Educational Psychology (Prerequisites: Ed. 221, Psy. 111)
These basic courses are prerequisites for filing application for admission to the professional semester. They are normally scheduled during the first two years of study. During the junior year, teacher education candidates make formal application to the Department of Education for admission to the Professional Semester in Teacher Education, either for the fall or spring semester of the senior year. Applications must be returned to the Coordinator of Teacher Education not later than the close of the fall semester.

The professional semester consists of block-scheduled, concentrated professional education courses, seminars, and clinical workshops, and full-time observation and supervised associate teaching in a nearby, cooperating public school system. It includes:

## First half of semester:

## Ed. 433-Educational Principles, Curriculum and Special Methods in Subject Areas

Ed. 443-Educational Evaluation (one-half course)
Ed. 451-The Use of Instructional Media (one-half course)

## Second half of semester:

Ed. 461-462-Observation and Supervised Associate Teaching
221. SOCIAL FOUNDATIONS OF EDUCATION Emphasis is on the role of the school in the social setting, the functions of schools in a changing society, community influences upon education, and the teacher's role in community and school. The historic development of the secondary school program in America is traced and compared with national systems of education in other countries.

## 231. EDUCATIONAL PSYCHOLOGY See Psychology 231.

433. EDUCATIONAL PRINCIPLES, CURRICULUM, AND SPECIAL METHODS IN SUBJECT AREAS Instruction in the planning, organizing, and conducting of instructional activities; in the developing of effective class management procedures; in the application of innovative pedagogical techniques; and in effectively using curricular materials and evaluative instruments. Considerable time is devoted to the specialized field in which certification is sought. Prerequisite: 221, 231, and admission to the professional semester.
434. EDUCATIONAL EVALUATION An introduction to evaluation principles and techniques focusing upon both teacher-constructed tests and standardized measurement instruments including testing terminology, types of instruments, selection procedures, and techniques for administering, scoring, tabulating, and interpreting test data. Prerequisite: 221, 231, and admission to the professional semester. One-half course.
435. THE USE OF INSTRUCTIONAL MEDIA A survey of all devices, techniques, and media available to today's educator. Attention is given to research findings and to projected developments. Students are required to prepare materials and gain experience with many media in clinical workshop sessions. One-half course.

461-462. SUPERVISED ASSOCIATE TEACHING AND OBSERVATION Observation and supervised associate teaching is done at nearby cooperating public secondary schools in the student's area of specialization on a full-time basis for eight weeks. This field experience is under the direction of college
and public school advisory personnel. Seminars in teacher education are conducted by the coordinator, who is responsible for assignments. Travel and personal expenses incurred are the responsibility of the student. Prerequisite: 221,231 and admission to the professional semester. There is a laboratory fee of $\$ 35$.

MAJOR: This department does not offer a major in education. The student preparing to teach completes his or her major in another department of the College.

## MINOR: six courses

NOTE: Subject to the approval of the Dickinson College Director of Student Teaching and the Chairman of the Department of Psychology and Education, a matriculated Dickinson College student may enroll in and receive credit for an Elementary Education semester at a Central Pennsylvania Consortium college in lieu of the professional semester in Secondary Education at Dickinson.


## PUBLIC SPEAKING

Professor Brubaker, Chairman<br>Assistant Professor Poole

The courses in public speaking are directed toward improvement in verbal communication and toward the development of greater self-assurance and ease in social and professional situations.
225. ARGUMENTATION AND DEBATE The logic and strategy of debate. Group discussion techniques. Participation in debate. Prerequisite: 323.
325. PUBLIC SPEAKING The theory of and practice in the fundamentals of public speaking.

## RELIGION

Professors D. Bechtel, Chairman, and Booth*
Associate Professors Rosenbaum* and Slotten
Assistant Professor Krebs
Instructor Elkins
Adjunct Professor Kaylor

The curriculum is designed to investigate the history, nature and implications of the manifold phenomena of human possibility and realization under the aspect of the sacred. The study of religion, therefore, includes historical, phenomenological, theological, textual, and related scholarly approaches.

On the one hand, the curriculum is organized around the study of selected religious traditions; on the other hand, it is organized around the investigation of religious experience that cannot be subsumed under the category of any particular tradition, including the religious aspects of secularity.

The study of religion invites an understanding, appropriate to the liberally educated person, of a vital dimension of human activity and sensibility and an informing background for graduate or professional education in the humanities and social sciences (e.g., medicine, law, education, public services).

[^6]For courses numbered 201, 202, 203, 207, 208, 209, 211, 220, detailed titles and descriptions will be published in April of each year to specify the course contents for the whole of the following academic year, with a tentative second year schedule.

Any student with a previous 200 level course may contract by add/drop time to constitute any enrolled 200 course (except Religion 204, 205) a 300 tutorially advanced course (the latter to involve regular additional discussions with the instructor, greater specialization in course papers, further reading). The full department must approve such requests before such contract and certification.

## A. Cross-Traditional and Methodological Courses

100. RELIGION IN THE ANCIENT MEDITERRANEAN WORLD An introduction to the study of religion (methodology, problematics) by way of a comparative survey of the religious traditions of the Egyptians, Sumerians, and ancient Semitic and Indo-European speaking peoples, such as the Hebrews and Arabs; the Greeks, Romans, and Indo-Iranians.
101. RELIGION IN SOUTH ASIA An introduction to the formative role of religious consciousness in the development of the cultures of India.
102. RELIGION IN EAST ASIA. An introduction to the formative role of religious consciousness in the development of the cultures of China and Japan.
103. TOPICS IN THE HISTORY OF RELIGIONS (in different semesters: Primitive and Archaic Religion; Myth and Ritual; Mysticism and Religious Tradition; Suffering and Anxiety; other). Specialized studies with methodological implications. Normal prerequisities: 100, 120, or 130 as appropriate to topic, or permission of the instructor.

## B. The Religious Traditions

## Various Traditions

201. TRADITIONS IN THE HISTORY OF RELIGIONS (in different semesters: Puranic Hinduism; Islam; Taoism; Confucianism; Celtic and Nordic Religion and Mythology; other). Specialized historical textual, and phenomenological studies. Normal prerequisites: 100, 120, or 130, as appropriate to topic, or permission of the instructor.

## Buddhism

(120 and 130 will be appropriate for students interested in the antecedents of Buddhism.)
202. STUDIES IN THE BUDDHIST TRADITION (in different semesters: Theravada; Mahayana; Zen; Tantra; other). Historical, phenomenological, and textual studies of the thought systems, practices, and cultural interactions of the major subtraditions of Buddhism. Normal prerequisites: 100, 120, or 130 as appropriate to topic, or permission of the instructor.

## Judaism

103. TORAH, PROPHETS, AND WRITINGS (The Old Testament): a critical examination and attempt to understand the literary deposit and the antecedent traditions remembered and formulated by the Ancient Israelites in encounter with their God, with other gods, and with the history and culture of the Ancient Near East.
104. STUDIES IN THE HEBREW TRADITION Critical examination and discussion of selected topics. (In different semesters: The Prophetic Faith; Wisdom in Israel and the Ancient Near East; Sacred Story, Temple \& Cultus; Other). Normal prerequisites: 100 or 103, as appropriate to topic, or permission of the instructor.

204, 205. JEWISH HISTORY A survey of the history of the Jewish People from ca. 445 B.C.E. to 1786 C.E. Two semesters: 204. Ezra to Islam: Hellenism, "Normative Judaism," Christianity. 205. Muhammad to Mendelssohn: Islam, Crusades, Jewish Philosophy, Reformation, Enlightenment.
206. STUDIES IN THE JEWISH TRADITION (in different semesters: Introduction to Talmud: a general study of the growth, nature and content of Halakhic and Midrashic material; Modern Jewish Thought: nineteenth and twentieth century Jewish responses to the problems attendant upon "emancipation," emphasis on Buber, Heschel, Rosenzweig, other.) Normal prerequisites: 103 or 204, 205, as appropriate to topic, or permission of the instructor.

## Christianity

(103 and 204 will be appropriate for students interested in the antecedents of Christianity.)
107. THE NEW TESTAMENT A critical examination and attempt to understand the New Testament as the written traditions that articulated the faith, expectations, and actions of the early Christians as they responded within Jewish and Greek culture to the historical events of their day, and especially the life and death of Jesus of Nazareth.
207. TOPICS IN NEW TESTAMENT STUDY A critical examination and discussion of selected issues. (In different terms: The Portrayal of Jesus in Traditions and History; New Testament Theology: Paul, John, Hebrews; Eschatology and Ethics in the New Testament; Christ, Cosmos, and History; Other). Normal prerequisites: 100 or 107 , or permission of the instructor.
108. THE EMERGENCE OF THE CHRISTIAN TRADITION The complex emergence of orthodoxy and the limits of its pluralism; the Church, its liturgy and
doctrine; its self understanding and its way in the world; the first four centuries.
109. THE EMERGENCE OF THE PROTESTANT TRADITION The reformations of the sixteenth century; their impulse and critiques; their solidarity and divergences; the problem of constructive Protestantism.
208. PEOPLE AND MOVEMENTS IN CHRISTIANITY Studies in paradigmatic and idiosyncratic individuals, and in historical movements and periods (in different semesters: Greek and Russian Orthodoxy; Augustine; Francis of Assisi, and Joan of Arc; Modern Catholic Thought; Other). Normal prerequisites: 100 or 108, or 109, as appropriate, or permission of the instructor.
209. ISSUES AND TOPICS IN CHRISTIANITY Critical inquiry into facets and problems in Christian thought (In different semesters: Judaeo-Christian Ethics; the Church as Community; Faith and Secularity; the Idea of the Saint; Other). Normal prerequisites: 100 or 108 or 109, as appropriate, or permission of the instructor.
C. American Religious Culture
211. ASPECTS OF AMERICAN RELIGIOUS CULTURE Studies of American life in which religion and other dimensions of culture significantly interact (In different semesters: The New England Tradition: Black Religious Experience in America; Jews and Judaism in the United States; American National and Civil Religion; Sects and Cults; Other).
D. Religion and Contemporary Culture
110. WESTERN RELIGION AND MODERN CULTURE Interpretive analyses of aspects of modern culture and sensibility - literary, social and institutional - from both secular and theological sources; inquiry into the dimensions of religion in culture, personal, social-ethical, and ecclesiastical.
410. RELIGION IN THE CONTEMPORARY WEST Critical explorations into the problematic and the forms of religious sensibility in the contemporary West. Normal Prerequisites: Senior standing and permission of the instructor.

The Major entails a minimum of 10 courses.

1. Religion 100
2. Four courses within a tradition (Buddhism, Judaism, Christianity).
3. Five courses chosen with departmental guidance to assure diversity and complementarity within the field.
4. Of the ten courses, three will be at the 300 level.

The Minor entails a minimum of 6 courses.

1. Religion 100
2. Three courses within a tradition
3. Two other courses
4. Declaration and Advisement

## RUSSIAN

(See German and Russian)

## RUSSIAN AND SOVIET AREA STUDIES

## Professor Friedman, Director

An interdisciplinary program designed to give a varied and eclectic coverage of the Russian and Soviet areas. Presented through the Department of Economics, History, Modern Languages, Political Science, Religion, and Sociology-Anthropology.
401. INTERDISCIPLINARY SEMINAR Intended to integrate the several approaches of the Russian and Soviet Area Studies program and to provide a framework for independent study of a comparative nature. Offered cooperatively by the staff of the program. Prerequisite: permission of the instructor.
MAJOR: Russian 231, 232 or Russian 233, 234; History 253, 254; Russian and Soviet Area Studies 401 ; and four courses of the following, of which no more than two, including independent studies,* may be accredited from any numbered group:

1. History $313^{*}$
2. Political Science $350,366,490^{*}$
3. Economics 376
4. Russian 352,$353 ; 354^{* *} ; 355^{* *}$
5. Religion 208*
6. Sociology 314

MINOR REQUIREMENT A (Recommended for those who plan to pursue graduate work in the field of Russian or Soviet studies): Russian 116 (or the equivalent); History 253, 254; Russian and Soviet Area Studies 401; and three courses from the following, of which no more than two, including independent studies*, may be accredited from any numbered group:

1. History $313^{*}$
2. Political Science $350,366,490^{*}$
3. Economics 376
4. Russian 231, 232, 233, 234
5. Russian $352,353,354,355$
6. Religion 208
7. Sociology 314

MINOR REQUIREMENT B (Recommended for those who do not plan to use materials of the Program as a foundation for graduate studies): History 253, 254; Russian and Soviet Area Studies 401; two courses from among Russian 352, 353, 354,355 ; and three courses from the following, of which no more than two, including independent studies,* may be accredited from any numbered group:

1. History $313 *$
2. Political Science 350, 366, 490*
3. Economics 376
4. Religion 208*
5. Sociology 314

* When the topic is approved by the coordinator.
** These courses count toward the major only if specified Russian language materials are used.


## SCIENCE

258. HISTORY OF SCIENCE In tracing the major developments in science as an aspect of Western civilization, special attention will be devoted to the following areas: the scientific method of inquiry; social consequences of scientific discovery; noted discoveries in the physical and life sciences.

CONTEMPORARY SCIENCE Exploration of the nature and growth of some of the major concepts by which science explains the phenomena of nature.
261. Problems of energy, communication and population in relation to quality of the environment and, in turn, of human life are discussed from their fundamental scientific basis.
262. Development of those concepts that relate to our knowledge of matter, with references to chemistry of the earth and especially to contemporary science and its implications for man.

These courses are intended primarily for non-science majors. They may be counted toward the required distribution courses in Division III for B.A. or B.S. candidates. Prerequisite: one year of a laboratory science.

## SOCIOLOGY-ANTHROPOLOGY

Professor Kavolis
Associate Professor Seaford
Assistant Professors deGrys, Chairwoman, and Israel
Through a comparative study of the variables and the constants in human behavior, in preliterate, historical, and contemporary social orders, the department aims at developing an empirically grounded and reasonably sensitive understanding of man's role in creating the conditions of his existence and of the human implications of particular choices within the known range of variation in social organization and cultural values.

## Anthropology

112. INTRODUCTORY ANTHROPOLOGY A panorama of man's biological and cultural evolution. Technology, society, language, art and religion as phenomenalizations of culture. Ethnocentric awareness. Human designs in spacetime. Culture as communication.
113. CULTURAL ECOLOGY Anthropological approaches to the study of human adaptation. Ecosystem models. Comparative study of human and nonhuman adaptations. Ecology and human survival. Offered in alternate years.
241 CONTEMPORARY PEOPLES OF LATIN AMERICA An approach to understanding the sociocultural dynamics of selected groups of contemporary Latin American peoples. Emphasis on peasantry. Offered in alternate years.
114. INDIGENOUS CIVILIZATION OF LATIN AMERICA An archaeological and ethnological reconstruction of the rise of civilization in Mesoamerica and South America from the early hunters to the high cultures of Aztec, Maya, and Inca. Cultural consequences of the Conquest. Offered in alternate years.
115. CONTEMPORARY CULTURES IN CHANGING AFRICA A survey of sub-Saharan societies with particular attention given to the East African cattle peoples, South Africa, and the West African states. The effects of the shift from tribe to nation in familial, ritual, economic, and political realism. The Organization of African Unity. The emergence of new patterns in society and culture. Offered in alternate years.
116. HUMAN EVOLUTION Man and his place among the vertebrates. The human skeleton compared with that of other primates in space and time. Mechanism of evolution. Comparative primate behavior. Evolution and ethics.
117. COMPARATIVE CULTURES: METHOD AND THEORY An introduction to theory and to comparative methodology in anthropology. Participant-observation, functionalism, British and French structuralism, the Human Relations Area Files, and problems inherent in doing anthropology due to its broad, interdisciplinary nature are explored. Doing research in cultures outside the pale of Western civilization is stressed. Prerequisite: 112 or permission of the instructor.
118. POPULATION An introduction to formal demography and theories of fertility, mortality and migration. Cross-cultural comparison of demographic phenomena. Analysis of solutions to increasing world population pressures.
119. RELIGION AND SOCIAL ORDER A cross-cultural survey of the functions of religion, magic and myth in simple and complex societies. Religion and communication. Myth and social structure. An historical summary of the scientific study of religion. Prerequisite: Another anthropology course or permission of the instructor. Offered in alternate years.
120. SOCIOCULTURAL CHANGE Evolutionary and revolutionary theories of social and cultural change. Innovation. Explanations of ambivalences toward change. In 1976-77, particular attention is given to alternate ways of thinking about male and female.

121. ANTHROPOLOGY SEMINAR A specialized seminar investigating the contributions of various anthropological approaches to the understanding of cultural processes. The cultural processes recently discussed have included Communication, Women in Anthropological Perspective, Kinship, and Death Rites. Prerequisite: permission of the instructor.

## Sociology

110. SOCIAL ANALYSIS Exploration of selected topics in the empirical study of the ways in which people's character and life chances are affected by social arrangements and of the activities by which these arrangements are perpetuated or changed.
111. INTRODUCTION TO THINKING ABOUT SOCIETY Examination of certain major patterns of belief in our society, such as belief in equality, in the social origins of evil, in the possibility and value of progress through social-political action, in science as truth, and in tolerance because of the relativity of all values. The influence of these beliefs on the way we live. Most of the reading material will be drawn from recognized classics of thought, with contemporary writings included as cautionary examples.
112. GROUP DYNAMICS This course draws on literary, cinematic and philosophic as well as sociological sources to analyze the forms and patterns of thought on diverse topics by various groups. Our focus is on the values displayed by groups as they encounter their surroundings and one another. Consult the instructor to find out what particular topic will be offered in a given year. Previous topics have been the relations between men and women, and living and aging.
113. SELF CULTURE AND SOCIETY An inquiry into the diverse ways in which human beings comprehend what kinds of persons they are. Close reading of autobiographies and analysis of emotional climates in which particular experiences of selfhood arise and of civilizational categories by which they are judged to be valid or not.
114. PERSPECTIVES ON RACE Race relations in the American and other societies. Afro-American history, dynamics of prejudice, pathologies of the ghetto, civil rights and Black Power movements and white reactions to them. Not offered in 1976-1977.
115. FAMILY BEHAVIOR An examination within a broad comparative framework, of the social functions of the family; the determinants of family cohesiveness; the effects of different modes of child-rearing; the implications of variation in the norms of sexual behavior.
116. SOCIAL STRATIFICATION An analysis of social class systems and derivative behaviors. Economy and political power as the tools and the formative agents of social classes. Styles of life and social mobility. Not offered in 1976-1977.
117. METHODS OF SOCIAL RESEARCH In combination with Theory, the teaching of the techniques of method is subordinated to an understanding of the role of method as a means of mastering the confusion of the empirical world. Methodologies are seen as commitments to fundamental theoretical positions. Prerequisite: One course in sociology, preferably 360, or permission of the instructor. This course must be taken concurrently with 380 .
118. SOVIET SOCIAL SYSTEM Analysis of social structure and dynamics of the Soviet Union. Identification of the areas of strain and the different possible directions of change. Comparison with American institutions. Offered in alternate years.
119. FIELD WORK IN URBAN PROBLEMS By combining readings, a seminar, and direct involvement, this course is designed to familiarize the student with the difficulties and complexities involved in applying sociological knowledge to the analysis and solution of urban problems. Individual or collective research, or action projects will be planned by the students and the instructor. These projects are to be carried out within groups or agencies concerned with poverty, racial tensions, community organization and redevelopment, education or other problem related aspects of urban setting. Weekly seminars and individual tutorials will involve a discussion of the ethical, theoretical and methodological materials relevant to the field work experience. Prerequisite: permission of the instructor. Not offered in 1976-77.
120. COMPARATIVE SOCIAL PATHOLOGY Survey of cross-cultural and historical studies on the social origins of destructive and self-destructive behavior. Social institutions, social change, and cultural values as sources of damage to life, health, and sense of fulfilled existence. Pathological myths. Responses to pathology.
121. DEVIANT BEHAVIOR AND SOCIAL CONTROL An evaluation of the adequacy of a variety of explanations of, and remedies for, such phenomena as crime, juvenile delinquency, mental illness and rebellion. How such explanations may be viewed as members' methods for assembling deviance. The relevance of philosophy of law to the explanation of deviance. Especially recommended to pre-law students. Prerequisite: There is no prerequisite, but it is suggested that the student have taken at least one sociology course prior to this one.
122. SOCIOLOGICAL THEORY In combination with Methods this course represents a philosophical, analytical, and speculative approach to the activity of theorizing. Representative works of sociologists, major and minor, are read as attempts to achieve absolute truth. Prerequisite: One course in sociology, preferably 360, or permission of the instructor. This course must be taken concurrently with 305 .
123. SOCIOLOGY SEMINAR A specialized seminar, intended to relate a broad area of theoretical concern to the problems and procedures of current research. Prerequisite: permission of the instructor.
124. INTERDISCIPLINARY SEMINAR This seminar provides an opportunity for multi-faceted exploration, in a working relationship with representatives of another social or humanistic discipline, of selected problems of joint interest. In 1976-77, the problem is The Post Industrial Transition. Prerequisite: Permission of the instructor.

## MAJOR:

The Department offers separate programs in Anthropology and Sociology.
Option one, students with emphasis in Anthropology are required to take 112, 306, 307,392 , and five other courses, one or two of which can, with the approval of their advisor, be taken in other departments.

Option two, students with emphasis in Sociology are required to take 305, 380, and seven other courses, one or two of which could, with the approval of their advisor, be taken in other departments.

Freshmen interested in either Sociology or Anthropology are urged to consult with the department at an early date.

No minor.
NOTE 1: Interdisciplinary Studies 101 and 301 will count towards the major.
NOTE 2: Comparative Civilizations 102, 105, and 490 can be counted towards the major for students with an emphasis in Sociology.

## SPANISH AND ITALIAN

## Professors Angiolillo and Martinez-Vidal, Chairman <br> Associate Professor Fox <br> Assistant Professors Petrucelli and Surís Instructor Clark

The courses in Spanish and Italian are designed to provide well-balanced training in language, literature and civilization for those who elect a major or minor in the department. Those who do not wish to meet the requirements for a major or minor may elect any courses for which they have the prerequisites as stated in the description of courses. Instruction on the elementary and intermediate levels is on an intensive basis, with five contact hours a week, including laboratory.

Unless otherwise indicated, all courses above the intermediate level are conducted in the foreign language (Spanish or Italian).

101-104. ELEMENTARY SPANISH An intensive study of the fundamentals of Spanish grammar, with special attention given to pronunciation and oral expression. Composition, and literary and cultural readings. Please refer to Graduation Requirements (Languages).
116. INTERMEDIATE SPANISH Introduction to conversation and composition with complementary readings. (Particularly recommended for students planning advanced studies in Spanish.) Prerequisite: 104 or the equivalent.

231, 232. SPANISH CONVERSATION AND COMPOSITION Careful attention to grammar and style as seen in short stories and articles and in compositions written on a periodical basis by the students. Advanced practice in the oral aspects of the language based on everyday situations. Supplementary oral drill through the use of the language laboratory. Prerequisite: 116 or the equivalent, with a grade of at least $C$.
233. INTRODUCTION TO HISPANIC LITERATURE This course offers an overview of the main periods and concepts in the literature of the Hispanic World as well as an introduction to the methods and terminology of literary criticism. A number of literary texts are selectively introduced to illustrate both cultural and literary trends. Prerequisite: 116 or the equivalent, with a grade of at least $C$.
234. SPANISH LITERATURE FROM ROMANTICISM TO THE PRESENT A survey of nineteenth and twentieth Century Peninsular Literature. Prerequisite: either 231, 232, or 233 or the equivalent, with a grade of at least C.
236. MASTERPIECES OF SPANISH AMERICAN LITERATURE Reading and discussion of representative works of Spanish American Literature from the colonial period to the present, with an emphasis on the twentieth century. Prerequisite: 233 or the equivalent.
290. TOPICS IN HISPANIC STUDIES Study of significant cultural, literary as well as Historical topics concerning the Spanish-speaking world. Penninsular and Latin American Topics alternate on a yearly basis. Some topics offered in past years were: Latin-America as a Colonial Province, and Sephardic Culture and Civilization. Specific topics to be announced before registration. Prerequisite: permission of the instructor. One-half or full course.
341. ASPECTS OF SPANISH CIVILIZATION A study of general historical and literary trends in the development of Spanish civilization. Oral and written reports concerning some cultural facets. Prerequisite: 231 or 232 or the equivalent.
343. THE CULTURE AND CIVILIZATION OF LATIN AMERICA TO 1825 A study of Latin-American history and culture from its beginnings to the end of the wars of independence. Study of the process of the discovery, conquest and colonization of Latin-America, the colonial system and its influence in the formation of the Latin-American character. Analysis of the development and characteristics of the independence movements. Given in alternate years. To be given in 1976-1977. Conducted in English.
344. THE CULTURE AND CIVILIZATION OF LATIN AMERICA SINCE 1825 Study of the formation of the Latin-American countries and of the main cultural, political, social and economic factors which have influenced their development since the achievement of independence. Emphasis on the historical and cultural significance of 20 th Century developments beginning with the Mexican Revolution. Given in alternate years. To be given in 1976-1977. Conducted in English.
352. SPANISH RENAISSANCE AND BAROQUE CULTURE, LITERATURE, PROSE AND POETRY A study of sixteenth and seventeenth centuries and the important writers which they produced, especially Garcilaso de la Vega, Cervantes, Gongora, and Quevedo. Offered in alternate years. To be given in 1976-1977. Prerequisite: 233 or 234 , or permission of the instructor.
353. SPANISH BAROQUE CULTURE, LITERATURE, DRAMA A study of 17th Century and the important dramatists which it produced, especially, Lope de Vega, Tirso de Molina, and Calderon. Course taught in English and Spanish. Offered in alternate years. To be given in 1976-1977. Prerequisite: 234 or the equivalent.
357. THE GENERATION OF 1898 Reading and discussion of selected works by the outstanding writers of this period: Unamuno, Valle-Inclán, Baroja, Azarín, Machado and others. Given in alternate years. Prerequisite: 234 or the equivalent.
358. CONTEMPORARY SPANISH LITERATURE Reading and discussion of representative contemporary novels, plays, and poetry. Given in alternate years. Prerequisite: 234 or the equivalent.
372. CONTEMPORARY SPANISH AMERICAN LITERATURE An in-depth study of important twentieth century works, with an emphasis on the new Spanish American novel since 1945. Given in alternate years. To be given in 1976-1977. Prerequisite: 233 or permission of the instructor.
382. SEMINAR IN SPANISH LITERATURE A thorough investigation of major figures or important literary trends in Hispanic Literature which was not covered by the majors in previous courses. The majors will work on a semi-independent basis with a particular instructor and will present reports to the seminar and participate in subsequent discussions. Prerequisite: a major or minor in Spanish or permission of the instructor.

MAJOR: Nine courses, numbered 231 and above (including Spanish, 233, 341 and 343 or 344 ), at least eight of which must be in the Department and in the language of the major. The course that is taken outside the language of the major must be approved by the language section involved.

MINOR: Five courses numbered 231 or above, including 231 or 232 (either of which may be waived by special permission of the Department).

NOTE: To elect a major, a student must have attained an inclusive average of at least 2.00 in all French, German, or Spanish courses taken in College.

## Italian

101-104. ELEMENTARY ITALIAN An intensive study of the fundamentals of Italian grammar, with special attention given to pronunciation and oral expression. Composition and literary and cultural readings. Please refer to Graduation Requirements (Languages).
116. INTERMEDIATE ITALIAN Introduction to conversation and composition with complementary readings. Prerequisite: 104 or the equivalent.
250. STUDIES IN ITALIAN LITERATURE Reading and discussion of masterpieces of Italian Literature. Prerequisite: 116 or the equivalent.
NOTE: A major and minor are not offered in Italian.

## STUDIES IN THEATRE AND DRAMATIC LITERATURE

Professor Brubaker, Director

An interdisciplinary program using the perspectives of the dramatic arts and literature to examine the theory, history and practice of theatre presented by the Departments of Classical Studies, Dramatic Arts, English, Modern Languages and Literature, and Music. Majors in this field are required to participate in the Mermaid Players and must be accepted by the coordinator.

MAJOR: ten courses including English 213 (Literature of the Western World I) and Dramatic Arts 302 (History of the Theatre); two of the following: Dramatic Arts 101 (Acting), 201 (Directing), 300 (Stagecraft and Scene Design); and six of the following, one of which shall be from Classical Studies or Modern Languages and Literature and one shall be a course dealing with the Renaissance Period:

No minor.

## Classical Studies

Greek 391, 392 Seminar: Greek Drama
Latin 234 Latin Poetry

## English

332 Renaissance English Drama
341 Shakespeare I
342 Shakespeare II
382 Modern Drama I
383 Modern Drama II
402 Seminar in Shakespeare


## Modern Languages and Literature

## French 352 The Theatre of the Sublime

 360 Modern French TheatreGerman 304 German Literature of the Baroque, Rationalism and Sturm und Drang
309 The Drama of the Nineteenth Century
313 Modern German Drama
Spanish 352 Spanish Renaissance and Baroque Culture, Literature, Prose and Poetry
353 Spanish Baroque Culture, Literature and Drama
Music
301 Twentieth Century Music
302 History of Opera

## Dramatic Arts

101 Acting
201 Directing
300 Stagecraft and Scene Design
304 Studies in Theatre History
Film
201 History and Art of the Film

## Independent Studies

There are occasional seminars offered by the several departments in topics appropriate to this field of concentration which would extend the list given above.



## SPECIAL PROGRAMS

The College offers a number of special programs of study which enrich the regular offerings of the several major departments and the normal curriculum. Dickinson believes that interdisciplinary programs, independent study, offcampus study, and other variations on the normal, on-campus, four-year, incourse degree program are important ingredients for heightened intellectual motivation.

## INDEPENDENT STUDIES, INDEPENDENT RESEARCH, AND HONORS IN A DISCIPLINE*

Dickinson recognizes the wide variation of interests, motivation, and abilities in its student body and believes that its academic program must provide options which meet these diverse needs. Accordingly, it encourages students with the requisite ability and motivation to undertake self-directed programs of study under the guidance of faculty members.

The following options compose the overall program of independent studies and research available in each of the academic programs which offer either a

[^7]major or a minor. The precise options may vary, however, from program to program. In addition, independent study is available in classical studies, computer science, Italian, Portuguese, Russian and library topics.

FRESHMAN INDEPENDENT STUDY. Freshmen who, on the basis of advanced placement, have qualified for credit in an introductory course (except foreign language courses below 230 and such other courses as may be designated by the departments) and desire to work more extensively at the survey or principles level of a discipline may enroll for a tutorially directed course or half-course in independent study within the same body of knowledge.

A freshman who wishes to take a second independent study, or who wishes to pursue independent study on terms available to sophomores, juniors, and seniors, must petition the Committee on Academic Program, with supporting statements from his academic advisor and proposed supervisory instructor.

INDEPENDENT STUDY FOR SOPHOMORES, JUNIORS AND SENIORS. Independent studies allow a student to pursue systematically an academic interest outside the listed course offerings. The study may include experimental work (in the sciences), reading, several short papers, a single paper, or any other device mutually acceptable to the supervising faculty members and the student. The work may be supervised by one instructor or several instructors from one department or several departments. Such interdepartmental studies must be approved beforehand by the Committee on Academic Program. Sophomores may undertake one independent study per semester unless permission is granted by the Committee on Academic Program to take two independent studies on the basis of a petition supported by the student's academic advisor. Juniors and seniors may undertake two such courses per semester. To be eligible, the student must have a cumulative average of 2.0 or the permission of the Committee on Academic Standards.

INDEPENDENT RESEARCH FOR JUNIORS AND SENIORS. Independent research, like independent study, allows a student to pursue an academic interest beyond the listed course offerings, but this pursuit must culminate in an original contribution to a discipline, whether in the form of fully supported conclusions or in the form of a creative effort. Although supervised by faculty from one department or several departments, the work is to be largely self-initiated and self-directed-an introduction into research and practice in presenting the results of an investigation. Conclusions must be presented for evaluation no later than one (1) month prior to the student's graduation. The program may be elected (maximum credit: four full courses per semester) for the junior year, the senior year, or both. In order to register for the program, special permission is required from the Committee on Academic Standards for
students with less than a 3.00 average in the department or departments supervising the independent research. Programs of independent research involving more than two such courses per semester must be approved by the Committee on Academic Program. Interdepartmental research must be supervised jointly by the respective faculty members and must also be approved by the Committee on Academic Program.

CANDIDACY FOR DEPARTMENTAL HONORS. Students participating in the independent research program described above shall be eligible to be voted departmental honors on the completion of the program. In assessing each candidate, the departments may conduct departmental comprehensive examinations or may invite outside examiners. If, in the judgment of the department, a candidate meets the standards for graduation with honors, his or her project shall be so designated.

## INTEGRATED INDEPENDENT STUDY AND/OR INDEPENDENT RESEARCH FOR JUNIORS AND SENIORS. This is a one or two-year program in any approved combination of integrated independent studies and/or independent research. The program, as developed by the student in consultation with the faculty concerned, shall be presented to the Committee on Academic Program for their approval and review.

COURSE-RELATED STUDY. Independent work of high quality done in conjunction with a regular course may be recognized by a letter of evaluation prepared by the instructor and incorporated in the student's permanent record.

## SPECIAL MAJORS

## TUTORIAL MAJORS

Some departments may approve superior students as tutorial majors. Such a program differs from Independent Studies and Research in several ways. For one, the student is guided in a program in the component areas of an entire discipline for approximately two years. That program's balance is ensured by prior departmental approval. Secondly, the student is free to take regular courses in his or her major discipline with the approval of the tutor. Normally the student will receive a letter grade for a 600 series course, but the Pass/Fail option is also available under the same restrictions as in standard courses.

The student meets on a regular basis with his or her tutor to discuss essays and readings dealing with particular problems posed by the tutor. Finally, the student sits for a comprehensive examination, both written and oral, administered by a committee composed of the department and one person outside the
department. Normally, at least one-quarter of the student's final semester is given over to preparation for these examinations. One re-examination may be permitted within the calendar year. Students will be graded on the examination as having passed, failed, or passed with departmental honors. Approved students may register for up to four courses per semester under the tutorial rubric.

## THE SELF-DEVELOPED MAJOR

The option of a self-developed major is available to students who desire a somewhat different field of concentration which, although a recognized field of learning and relevant to the liberal arts, is not substantially addressed by any one department. Recent Self-Developed Majors have included Women's Studies, Medieval Studies, Russian Language and Literature, and Black Studies.

A student contemplating a Self-Developed Major should prepare a proposal which includes those courses relevant to his or her other topic, and seek the written endorsement of four faculty members for the proposed major which shall consist of ten or more courses. The supporting faculty will secure the advice of chairmen of those departments in which the student contemplates course work for concentration.
The student must present this validated proposal to the Academic Program Committee for approval by the Subcommittee on The Self-Developed Major. The student in this program will work closely with an appointed adviser. Changes desired in this program will be submitted with the approval of the adviser in written form to the Subcommittee for final approval. Under ordinary circumstances, a student accepted in a Self-Developed Major may not apply any of the ten approved courses toward the completion of a departmental major or minor.

Upon the completion of every semester, each student involved in the SelfDeveloped Major will submit to the Subcommittee (with a copy to the adviser) an evaluation statement of progress and commitment to the major as a whole, experience in individual courses, and work with the adviser. The adviser will submit to the Subcommittee, and to the student an evaluation describing the student's progress, achievement, and commitment.

A student who does not possess departmental course prerequisites for a particular desired course must present to the department chairman a copy of the major proposal indicating the importance and value of that course to the major, and providing to the chairman his or her ability to handle the course. The chairman, in consultation with the instructor of that course, will then act upon the request for a waiver of the prerequisite.

At the conclusion of the student's work the transcript will describe the major as follows: Self-Developed Major; (Title)

## SPECIAL OPTIONS OF STUDY

1. NISBET SCHOLARS PROGRAM Beginning with the Class of 1980, the College will provide an alternative to the present graduation requirements in the form of a pilot project called the Nisbet Scholars Program. Each member of a freshman class may apply, and up to forty-eight Nisbet Scholars per class will be selected. They will be excused from all college curricular requirements in order to plan for themselves a course of study suited to their individual needs, personal educational goals, and post-graduation career plans.

It is important that these choices be informed by the history and theory of higher education, tested by the rigors and frustrations of practical involvement in the affairs of society and reassessed continually by the help of others with similar aspirations. Therefore, Nisbet Scholars during their first year at Dickinson participate in a freshman seminar and a problem-centered learning project. Thereafter, they continue to meet regularly with an advisor and their seminar peers throughout the four years they are at Dickinson. The graduation requirement for Nisbet Scholars is 34 courses with a major, including the Nisbet Seminar and a one course problem-oriented experience during the freshman year.

The Nisbet Scholars Program is named in honor of Charles A. Nisbet, first president of Dickinson College. Nisbet was persuaded by Benjamin Rush to come to Carlisle in 1783 to assume the leadership of a small college founded on the frontier to educate a nation's youth in literature, science, and moral philosophy. He sought to liberate their minds so that they might be prepared to assume in difficult times the leadership of a fledgling nation. Today's Nisbet Scholars have the opportunity and the responsibility to find for themselves a manner of learning that will permit them in their own quite different times to aspire to the same individual and social ideals Nisbet envisioned.
2. ASIAN STUDIES: SOUTH OR EAST ASIA By informal arrangement with the University of Pennsylvania, well-qualified, highly motivated Dickinson students may elect to spend a summer, a semester, or a full academic year (normally the senior year) studying in the Department of South Asian Studies or the Department of Oriental Studies at the University of Pennsylvania. Such election shall be contingent upon recommendation by the student's major department at Dickinson, approval of the Dean of the College, and acceptance by either department at the University of Pennsylvania. Seniors completing the requirements for the Bachelor of Arts degree at Dickinson who are in residence at the University of Pennsylvania during the entire senior year are exempt from the Dickinson senior residence requirements.

A student planning such a senior year program normally should expect to enroll for intensive language study during the summer prior to the senior year at the University of Pennsylvania. If recommended for graduate study in the
same field by the department in which the student is enrolled, the student should anticipate further intensive language study during the summer immediately following completion of the senior year. Majors in either South or East Asian Area Studies are to be pursued in accordance with the provisions of the College for self-developed majors worked out by the student in conjunction with the Academic Program Committee.
3. THE LATIN AMERICAN STUDIES PROGRAM Students with an interest in Latin America may apply for candidacy towards the Certificate in Latin American Studies. A candidate for the Certificate will work under the supervision of a member of the Latin American Studies Committee in planning the fulfillment of the requirements of this interdisciplinary program, which include: (1) The successful completion of six approved Latin American courses or Independent Studies taken in at least three Academic Departments; (2) Demonstrated language proficiency in Spanish or Portuguese, equivalent, as a minimum, to the completion of a two-hundred level Conversation and Composition course; and (3) Successful oral defense of an interdisciplinary research paper written under the supervision of at least two Faculty members of different Departments. A portion of the defense will be conducted in Spanish or Portuguese as part of the language proficiency certification process.

Students who participate in the Colombia Program in Medellín or any other Off-Campus programs approved by the College's Director of Off-Campus Studies, may petition the Latin American Studies Committee to have a maximum of three Latin American courses taken in said programs applied to the course requirements stated above.

This program is viewed as a supporting field of expertise for students majoring in a variety of disciplines, such as History, Economics, Education, Fine Arts, Political Science, International Studies, Sociology-Anthropology and Spanish. In terms of career prospects, it is specially recommended to future graduates planning to go into High School teaching or social work and related areas in the inner city, as well as to those planning to seek employment with the foreign service, the military, multinational corporations and other governmental agencies or private firms with overseas interests.

For further information on the Certificate, students should contact the program's Coordinator or the Latin American Committee's representative in the Department of their major.
4. THE BINARY ENGINEERING PROGRAM Dickinson College furnishes a program for engineering students, called the Binary Engineering Program, that combines advantages of the small liberal arts college with training to be secured at a large urban engineering school. Cooperating with Dickinson College in this program are the University of Pennsylvania engineering schools, Rensselaer Polytechnic Institute and the Case Institute of

Technology. The student can select one of several options under the plan: the first three years may be spent at Dickinson and the final two at the engineering school, leading to a B.S. degree from both institutions; or four years may be spent at Dickinson earning a B.S. degree from Dickinson and then one or two years at the engineering school leading to an M.S. degree in engineering.

The liberal arts-engineering combination recognizes the defects inherent in specialization in the engineering schools, and provides for the Dickinson student a generous background in pure science, in the humanities, and in the social sciences. The program is particularly appealing to those freshmen who like the liberal arts and are not yet willing to commit themselves completely to an engineering curriculum.

Candidates for the Binary Engineering Program should inform the Director of Admissions of Dickinson College that they wish to apply for this program so that they may be assigned to the engineering student adviser. The student in his freshman year should take Physics 131, 132 and Mathematics 141, 142. Students interested in this program should request from the Dickinson Admissions Office a special booklet which describes the "Binary Engineering Plan" in greater detail and gives suggested course schedules.
5. THREE-YEAR DEGREE PROGRAM Students desiring to accelerate their degree programs may do so by enrollment in the summer session of the College. A carefully planned degree program, particularly in the first two years, may be completed in three regular academic years (six semesters) and additional summer work. Some will find it wise to begin the summer before the freshman year. One of the advantages of the accelerated degree program is the substantial saving in time, as well as cost, to the student.
6. SUMMER SCHOOL A representative selection of regular Dickinson College courses, and some special summer programs, are offered during Summer School. These courses are offered either as $5 \frac{1}{2}$ week courses or as intensive, full-time three week courses. It is possible to take up to four courses in one summer.

Regularly enrolled students from Dickinson or the other colleges in the Central Pennsylvania Consortium may attend Summer School to accelerate their programs or to take advantage of some of the unique opportunities. Students in good standing at other colleges are welcome. Qualified high school students may enroll in regularly scheduled summer classes.

Entering freshmen are encouraged to attend all or any part of the Summer School program. A three-week interdisciplinary Dickinson Colloquium is offered frequently and is open to entering freshmen. A brochure describing this unusual educational experience is available from the Director of Summer School.

The Central Pennsylvania Consortium sponsors unique programs, including special institutes, travel programs, and field science courses.

For further information about any of the Summer School opportunities, contact the Director of Summer School. The Summer School Bulletin, published in February, may be obtained from the Director's Office.

## - OFF-CAMPUS STUDY PROGRAMS

Dickinson College encourages its students to investigate the appropriateness of an off-campus learning experience to their educational objectives. When carefully planned in advance and integrated with a student's oncampus academic program, off-campus study can provide cultural enrichment, personal development, and intellectual challenge through specialized learning environments, many of them utilizing unique resources which cannot be duplicated within the traditional on-campus classroom setting.

The following pages present off-campus programs with which Dickinson is associated. However, they represent only a fraction of the opportunities available. Information about these and other unique off-campus learning experiences can be found in the Office of Off-Campus Studies.

## FOREIGN PROGRAMS

1. CENTER FOR EUROPEAN STUDIES IN BOLOGNA Students interested in a junior or senior year abroad to study European politics, history, economics, and international affairs, may apply for admission to the College's program in Bologna, Italy. Twenty-eight students are selected each year for study at the Dickinson Center, which was established in 1965 in affiliation with the Johns Hopkins University Center in Bologna, under the supervision of a member of the Dickinson faculty. The curriculum includes such courses as Modern European History (19th and 20th centuries), International Relations, History of European Political and Social Thought, Art History, International Economics, and an interdisciplinary seminar, the Bologna Practicum, which focuses on the city of Bologna itself. Opportunities are also available for independent study with the Dickinson and Johns Hopkins instructors. Courses are taught in English by the Dickinson director and faculty members from Italian universities and Johns Hopkins. Participants who have not had one semester of Italian previously will be required to take Elementary Italian in Bologna. No particular major is a prerequisite for participation.

Financial aid may be applied for through the customary procedures followed on campus. Interested students should consult with the resident coordinator.
2. INSTITUTE OF EUROPEAN STUDIES The Institute of European Studies offers study programs for juniors and seniors at seven leading European university centers (Durham, Freiburg, London, Madrid, Nantes, Paris,

Vienna), each one offering unique perspectives and opportunities utilizing the particular academic and cultural resources of its location. Under the supervision of a permanent Resident Director, each center offers its own particular academic programs, experienced academic advisors accustomed to dealing with the difficulties in integrating a student's foreign study program with that of his home institution, and a full range of supportive services: housing, university registration, personal counseling, medical care, student activities, records, and the like.

The Institute also provides orientation programs including intensive language study where appropriate. Students study under distinguished European professorsina European environment. The London, Madrid, Nantes, Paris and Vienna centers offer a core of courses taught within the Institute by university professors and, except for London, also enable qualified students to enroll in regular courses within the faculties of the universities themselves. At Durham and Freiburg, students enroll as fully integrated students of the university, and the Institute provides tutorial assistance supplementing their university course work whenever appropriate. Students are recommended for admission by the College. Limited financial assistance is offered. For further information, consult the Campus Coordinator.
3. INTERCOLLEGIATE CENTER FOR CLASSICAL STUDIES IN ROME Majors in Latin or Greek, or other students especially interested in classical antiquity, can spend one or two semesters at the Intercollegiate Center for Classical Studies in Rome. This center features the combination of carefully chosen master teachers from American colleges and universities with the irreplaceable glory of the sites of the classical past. Dickinson students are eligible for scholarships to the Center. The Dickinson Classics Department also has a scholarship which may be used for a semester at the Center. Field trips from the Center in Rome are part of every semester's work, concentrating on the Etruscan north in the fall term and the Naples area in the spring. At the same time, in the middle of Rome itself, classes in the Latin and Greek texts allow the student to complete the same reading he or she would have done at the home campus.

## 4. THE COLOMBIA PROGRAM IN MEDELLÍN The Colombia Program

 is a semester or a full academic year of study in Medellin, Republic of Colombia. Supervised by a Resident Director, the program offers to students an opportunity for immersion in an Hispanic environment, both academic and cultural. Students are enrolled in regular university classes with Colombia students and may take a wide variety of courses in these institutions: Universidad de Medellín, all university faculties; Universidad Pontificia Bolivariana, all university faculties; Universidad de San Buenaventura, psychology and sociology; EAFIT (Escuela de Administracion y Finanzas-Instituto Tec-nologico), business administration. In addition, all students participate in a core seminar on Latin American Civilization and Culture, taught by the Resident Director. The program is open to Spanish majors and students of other disciplines with an interest in Latin America who possess a working knowledge of the Spanish language. Sophomores and juniors are eligible to apply.
5. INDIA SEMESTER PROGRAM Under the direction of a member of one of the Central Pennsylvania Consortium faculties, the program offers a fall semester of study at the University of Mysore, Mysore, India. Students are introduced to Indian history, culture, religion, and contemporary de-

velopments, and then take a core of four courses on the Cultural Heritage of Karnataka (the historic name of Mysore State) taught in English by faculty of the University of Mysore: Kannada Language, The Dynamics of Indian Society, The People and Places of Mysore, and Karnatic History and Culture. In addition, students may audit regular courses in the university in areas such as anthropology, archaeology, Indian philosophy, music, dance, and yoga. Sophomores, Juniors and Seniors may apply.
6. OTHER study abroad programs are available throughout the world. Students may be able to enroll directly in a foreign university, in specialized courses and insititutes for foreigners at leading universities abroad, or in American college-sponsored programs designed to meet the needs of American students who wish to pursue their educational interests in another part of the world. Recent Dickinson students have studied for an academic year, a semester, or a summer throughout Western Europe, and in the Soviet Union, South Africa, Senegal, Hong Kong, Ghana, India, Israel, Colombia, Mexico and Canada. The Office of Off-Campus Studies has more information on programs and procedures.

## PROGRAMS IN THE UNITED STATES

1. THE HARRISBURG URBAN SEMESTER The Harrisburg Urban Semester (THUS) is a comprehensive one-semester exploration of urban society, sponsored by the Central Pennsylvania Consortium and available through Dickinson College. Student participants will spend either the fall or the spring term in housing of their choice, normally in the center city area of Harrisburg. The program is designed as a four-course experience, including an internship, an urban seminar, a special interest seminar or an independent study relevant to the internship and directed by an on-campus faculty member. Students who wish to deviate from the four-course program must have the approval of the Director of Off-Campus Studies.

URBAN SEMESTER 301, 302
Internship - 2 course credits - Each student will intern on a 20 to 25 hour per week basis with a public or private agency within the urban environment. Internships are available in federal, state, county, city, private secular, and private religious agencies. The intership is intended to accommodate the vocational, educational, and personal goals of the individual participant.

(NOTE: One of the internship course grades is on a Credit/No Credit basis, while the other course will receive a regular letter grade. Both evaluations will be given by faculty of The Harrisburg Urban Semester.)

## URBAN SEMESTER 305

Urban Seminar - 1 course - This multi-disciplinary seminar taught by THUS faculty focuses on the nature and problems of urban society. In addition to comprehensive reading assignments, source materials may be provided by selected urban professionals, community leaders, and concerned urban citizens, who will be present at some of the classroom sessions. Further, the seminar will bring together the various urban perspectives of the students which have developed through their internship experience.
(NOTE: The grade for this course is given by the faculty of The Harrisburg Urban Semester.)

## URBAN SEMESTER 306

Special Interest Seminar - 1 course - Each semester several special topics will be treated in a seminar format. Topics are selected with regard to the general internship interests of student participants and each student may select that seminar group which is treating the topic of greatest relevance to the student.
(NOTE: The grade for this course is given by the faculty of the Harrisburg Urban Semester.)
2. THE WASHINGTON SEMESTER PROGRAMS In cooperation with the American University and an allied group of colleges and universities, Dickinson offers to a few high-ranking students (usually juniors) the opportunity to participate in one of several academic programs sponsored by the American University in Washington D.C.

The one semester opportunities are American Government, Urban Studies, American Foreign Policy, International Development, Economic Policy, American Studies, and Science and Technology.

The usual course of study includes a seminar in which the student has an opportunity to listen to and question government officials from all levels, Supreme Court Justices to lower level bureaucrats. In addition, the program requires a substantial independent research paper. There is also the opportunity to serve in an internship with an office on Capitol Hill, such as in an agency, a lobby organization or another course-related office. As an alternative to such an internship, the student may elect a regular course offered by the University.

Dickinson students are eligible to participate in the fall semester. They should consult with the Dickinson coordinator early in their academic career to receive further details on the programs and on courses which may be required as prerequisite to admission.
3. THE CONSORTIUM EXCHANGE PROGRAM Dickinson, Franklin and Marshall, Gettysburg and Wilson Colleges form the Central Pennsylvania Consortium. One of the advantages of this educational cooperative venture is that students have the opportunity to take courses at any member college. This program of exchange is encouraged because it allows for greater flexibility in a student's educational program.

The Office of the Associate Dean coordinates Consortium exchange programs for students. The appropriate forms, catalogues, and other information are available there. The application procedure is rather simple, with only an application form and a course approval form necessary. Applications should be submitted to that office by May 1 for a Fall Semester, and December 1 for a Spring Semester.

Any Dickinson student who is approved by this College for study at Franklin and Marshall, Gettysburg, or Wilson College, may take a course, several courses, or a full semester at the other college. Except for summer programs at Franklin and Marshall, the normal tuition fee is paid to Dickinson. No fees need be paid to the other college except residence fees where appropriate. Grades, in addition to course credit, are transferred into this college.
Transfer credit for courses taken at another Consortium College may take one of three forms:

1. Credit for the equivalent of a particular Dickinson course (approved by the chairperson of the appropriate department).
2. General credit in a particular department (approved by the chairperson).
3. General college course credit toward graduation (approved by the Subcommittee on Off-Campus Study).
4. OFF- CAMPUS INTERNSHIPS are defined as special work/study assignments which provide the opportunity to learn through practical experience in a field related to students' academic interests. Normally open only to juniors and seniors, internships must be approved in advance by the Subcommittee on OffCampus Study. The Subcommittee will assign academic credit up to à maximum of nine courses within a given academic year, with a minimum of half a course within a given semester. Internships normally will be undertaken on a Credit/No Credit basis.
Procedure
A. To participate in internships approved as regular offerings of an academic department of the College, a student must
5. Satisfy stated departmental requirements for the internship
6. State in writing educational objectives applicable to the internship
7. Obtain the approval of the chairman of the department and the Director of Off-Campus Studies
B. For all other internships, a student must
8. Develop a written proposal containing:
a. the educational objectives of the proposed off-campus internship, relating them to a particular academic discipline
b. a detailed description of the internship project
c. a reading list and a statement of its relevance to the internship project
d. a description of the kind of physical evidence which the student will present at the completion of the internship in order to demonstrate that the educational objectives have or have not been met.
9. Obtain written approval of the project from the Dickinson faculty member who will supervise the student's internship.
10. Obtain a letter of approval from the person who will serve as the on-site supervisor.
11. Submit the proposal and supporting documents through the Director of Off-Campus Studies to the Subcommittee on Off-Campus Study for approval. The Subcommittee may require the student to defend the proposal in an oral interview.
C. If the student's internship is approved, the student's faculty internship adviser will be responsible for: 1) maintaining contact with and obtaining evaluative information from the on-site supervisor; 2) monitoring and evaluating the student's work at the completion of the project; 3) reporting that evaluation to the Subcommittee.
D. At the completion of the internship and before credit can be granted, it is the student's responsibility to satisfy the following criteria:
12. The student must submit to the faculty internship adviser the results of the internship experience in a readily visible form such as an essay, a summary report, a project, a creative work. The results must demonstrate that the student has combined and assimilated the practical experience and the academic work. In addition, they must indicate to what extent the originally stated educational objectives have been fulfilled.
13. The student must submit to the Subcommittee on Off-Campus Study a statement describing the internship in sufficient detail so that it could essentially be repeated by another student, if it were desired. These statements will be kept on file in the Office of Off-Campus Studies where they can be consulted by other students interested in similar experiences.
14. If the student's internship is for more than two course credits per semester, the following criterion must be satisfied (in addition to the two noted above):
The student must defend in person the results of the internship experience in an oral examination with the faculty internship adviser, a member of the Subcommittee and at least one faculty member from the appropriate academic department(s) appointed by the Chairperson of the Subcommittee.
15. OTHER unique programs of study are available in this country. For example, recent Dickinson students have studied off-campus to pursue special interests in the following curricular areas: Appalachian culture. Archaeology, Black Studies, Chinese, East-West Comparative Cultures, Journalism, Public Communications, Urban Studies, and Women Studies.



## ACADEMIC REGULATIONS*

## CLASS DESIGNATION

The freshman, sophomore, and junior years are normally interpreted as the first, second, and third college years of attendance as a regular student. A student will be registered as a sophomore when he/she has completed 8 courses creditable toward graduation, as a junior when he/she has completed 16 courses creditable toward graduation, and as a senior when he/she has completed 24 courses creditable toward graduation.

In the case of a student entering Dickinson with advanced standing because of work done at other institutions, the Registrar will determine his/her status as to class. In all other cases involving such irregularities as work done outside the Dickinson College year, the Dean of the College will determine the student's class.

[^8]
## CLASSIFICATION OF STUDENTS

A matriculated student is one who has been formally enrolled at the College as a degree candidate. A non-matriculated student is one who has not been formally admitted as a degree candidate. A full-time student is one who carries a minimum of 3 courses. The maximum course load for a student is $5^{1 / 2}$ courses unless permission for an overload is received from the Committee on Academic Standards. A part-time student is one who is carrying less than a full-time academic load.

Normally, a degree candidate will be a full-time student, and a non-degree student will be a part-time student. A degree candidate who desires part-time status must have the approval of the Registrar, who may seek the advice of the Committee on Academic Standards in unusual circumstances. A non-degree student who desires full-time status must have the approval of the Director of Admissions, who may seek the advice of the Committee on Admissions and Financial Aid in unusual circumstances. Approval for these categories of status may be for a semester or a year, and is renewable.

A non-degree student who desires to become a degree candidate must receive the approval of the Committee on Admissions and Financial Aid. In seeking such approval, the student must submit all transfer credit taken to date that he plans to apply toward the Dickinson degree. In general, he or she must meet all the requirements for graduation in effect at the time of acceptance, including the fact that he or she must be accepted as a major by some department by the time 22 courses have been completed. Failure to be accepted as a major entails required withdrawal from the College without the privilege of readmission. In addition, a non-degree student must meet the same requirement as a transfer student, i.e., he or she must complete 16 courses on campus, the last twelve of which must be taken while the student is matriculated with an approved major field of concentration.

## 1. Full-time matriculated

Students who are enrolled as degree candidates and are carrying a minimum course load of three courses are full-time matriculated.

## 2. Part-time non-matriculated

Students who have not been admitted as degree candidates and are carrying fewer than three courses are part-time non-matriculated.

## 3. Part-time matriculated and full-time non-matriculated

Such status can be granted subject to approval as described above.

## 4. In absentia

This status may be granted for one semester, or one year, by the Office of

Student Services and the Director of Off-Campus Studies. Students who return on schedule do not need to apply for formal readmission. Students who do not provide due notice ( 60 days) of change in the date of expected return or who are not granted an extension of the return date must apply for formal readmission. Students may transfer to Dickinson up to one full year of academic work, if prior approval of the program has been granted by the Director of Off-Campus Studies.
A. A student participating in off-campus study programs specifically associated with or approved by the College is granted in absentia status upon his or her acceptance into the program. These programs are: Center for European Studies in Bologna; the semester programs at American University in Washington; Asian Studies at the University of Pennsylvania; Institute of European Studies; the Colombia Program; the India Semester; the Harrisburg Urban Semester; Binary Engineering Programs.
B. A student planning to participate in programs of study not among those specifically associated with or approved by the College must apply for in absentia status and must secure prior approval of the program of study from the Director of Off-Campus Studies. A student in this status does not register or pay tuition and fees as a Dickinson student.

## 5. Leave of absence

This status may be granted for one semester or one year by the Office of Student Services and the Associate Dean of the College and is subject to renewal. Students who return on schedule do not need to apply for formal readmission. Students who do not provide due notice (sixty days) of a change in the date of expected return or are not granted an extension of the return date must apply for formal readmission. Students may not transfer in any course work.
A. Voluntary. A student may be granted this status providing it does not begin after the date of roll call for any given semester. "W" for withdrawal will be recorded in lieu of grades for all registered courses.
B. Required. A student may be required by the Dean of the College to take up to one semester's leave of absence if such action is judged to be in the student's academic interest.

## 6. Withdrawal

A. Voluntary. A student may withdraw voluntarily from the College at any time, with "W" grades being recorded for all enrolled courses if withdrawal is made before the first day of final examinations. If withdrawal is made during the final examination period, regular grades will be recorded. A student who withdraws must make formal application for readmission.


## B. Required.

(1) First-a required withdrawal for academic reasons. To qualify for readmission, the student must attend an accredited college elsewhere for one regular semester (not a summer session); have his program of study approved in advance by the Associate Dean of the College and the Committee on Academic Standards; and attain a minimum average of at least 2.25 with no grades lower than a C. Military service or satisfactory employment, normally for at least one year, may be substituted for this scholastic experience. A student who is required to withdraw must make formal application for readmission by stated deadlines on page 15 .
(2) Second-a student required to withdraw for a second time for academic reasons does not have the privilege of applying for readmission at any time.
(3) Administrative-students who fail to register and do not inform the college of their plans or those that do not pay the pre-registration fee by the stated deadline, will be Administratively Withdrawn, but have the privilege of following the readmission guidelines on page 15 .

## REGISTRATION AND ADVISING

Final registration occurs for all students in January for the spring term and in September for the fall term. However, there are pre-registration periods in November and April during which students must meet with their advisers and make academic plans for the next semester. The only exceptions to this are incoming freshmen and new transfer students who get advisement during New Student Orientation. Each new student is assigned to a faculty adviser who is responsible for approving his/her final registration and who advises him/her until he/she selects and is accepted by a department or interdiciplinary study area as a major.

Responsibility rests with the student for the election of such courses as will satisfy the requirements of the College for graduation.

A variety of circumstances, singly or in combination, may prevent an undergraduate from realizing fullest benefit from the educational opportunity provided him. Injudicious selection of courses, of majors and minors; inappropriate personal aspirations; inadequate study techniques or invalid learning procedures; and problems of personal and social adjustments are unfavorable circumstances that have been identified in studies of less successful college students. The College believes that counsel by mature, interested faculty advisers can assist individual students to recognize and to overcome those undesirable circumstances that affect their academic success. In special instances, the adviser makes referrals to a qualified director of counseling who assists the student to overcome problems in his/her personal and social adjustment.


## SCHEDULE CHANGES

Students may add courses in their schedules during the first fifteen academic days of a semester if they have the approval of their adviser and the instructor(s) in question. Students may drop courses, without penalty, in their schedule during the first fifteen academic days of a semester if they have the approval of their adviser. A student must petition the College Committee on Academic Standards for approval of a withdrawal from a course after the Add/Drop period, with a "W" grade being recorded if the petition is approved. In circumstances in which a student has not participated in a course to any substantial extent due to circumstances beyond his or her control the Standards Committee may be petitioned for approval of dropping of the course from the record after the three week add/drop period.

A special situation prevails for multilevel courses in languages, mathematics, and the sciences, where adjustments may be made in the level of an assignment up to the time of roll call. The conditions of these reassignments are set forth on page 43.

## COURSE CREDIT

CREDIT FOR COURSE WORK AT DICKINSON: Credit for courses is based on the assumption that at least three and one-half hours of study accompany each period of recitation or lecture.

CREDIT FOR ACADEMIC WORK OFF CAMPUS: Dickinson students normally receive credit for up to one full year of academic work completed abroad or at other accredited institutions, provided the courses parallel the curriculum of Dickinson College and the student has obtained prior approval of his program of study from his academic adviser and the Director of OffCampus Studies.

At the completion of the off-campus experience; students are responsible for submitting an official transcript or, where that is impossible, a satisfactory certificate of accomplishment. The graduation requirement of 34 courses normally will be reduced by nine for an academic year of full time work if all course grades are at least "C" or its equivalent. Part time course work, semester and summer study, and unusual circumstances will be evaluated on a proportional basis using the above formula.

Final determination of credit and satisfaction of Dickinson distribution and language requirements will be determined by the Registrar. However, a standardized language test may be required of students wishing to satisfy the language requirement through course work completed abroad. In addition, students are responsible for ascertaining from the appropriate department chairman the extent to which work completed off campus will satisfy the requirements of their major or minor field of concentration.


Off-campus study involving any of the following circumstances requires prior approval of the Subcommittee on Off-Campus Study:

1. participation in more than two semesters of study off campus;
2. participation in more than one off-campus program;
3. credit for summer study at other institutions for more than one summer, or summer study for more than two course credits (four if taken between the freshman and sophomore years);
4. off-campus study in the senior year if it requires a waiver of the residence requirement that states that "at least six of the last eight or the last four courses immediately preceding graduation must be taken on campus."

As a general policy, students are not allowed to spend just the spring semester studying off campus. Therefore students desirous of taking only one semester off campus should plan to be away from the College during the fall semester. Exceptions may be granted by the Subcommittee on Off-Campus Study.

## THE GRADING SYSTEM

MARKING PERIODS: There is a roll call for all students in each semester. At this roll call only grades of D, F, and I are reported to the Registrar, except that all grades are reported for freshmen at the regular fall semester roll call.

Grades will be reported to the Registrar at the end of each semester. Once a grade has been reported to the Registrar's Office it may not be changed unless the change has been approved by both the instructor and the Dean of the College.

NOTATIONS APPEARING ON THE ACADEMIC RECORD:
In 1976, the faculty voted to change from A, B, C, D, and F grading to a system incorporating pluses and minuses.

Beginning in the Fall of 1976, therefore, the grading for course work is as follows: A, A-, B + , B, B-, C $+, \mathrm{C}, \mathrm{C}-, \mathrm{D}+, \mathrm{D}, \mathrm{D}-$, and $\mathrm{F} . \mathrm{Pa}$ or Fa (Pass or Fail), CR* or NoCR (Credit or No Credit), S** (Satisfactory), I (Incomplete), Au (Audit), W (withdrew) continue unchanged.

COMPUTATION OF AVERAGES: In the computation of averages the following scale of quality credit points will apply:

| Grade | Quality Points |
| :---: | :---: |
| A | 4.00 |
| A- | 3.67 |
| B+ | 3.33 |
| B | 3.00 |
| B- | 2.67 |
| C+ | 2.33 |
| C | 2.00 |
| C- | 1.67 |
| D+ | 1.33 |
| D | 1.00 |
| D- | 0.67 |
| F | 0.00 |

A student's cumulative average shall be computed on the basis of all academic work which received a regular letter grade at Dickinson College or at other Consortium Colleges. The average shall be computed by summing the quality points for each letter graded course and dividing by the number of such courses taken. All averages shall be carried to two decimal points.

APPLICATION OF AVERAGES: A regular student is required to meet the following minimum standards of academic quality during his or her academic program.

Freshman: An average for the year of 1.75 .
Sophomore: An average for the year of 2.00 or a cumulative average of 2.00 at the end of his or her sophomore year.

Junior: A cumulative average of 2.00 at the end of his or her junior year.
Senior (to be graduated): An average of 2.00 in all graded courses.

[^9]A student who fails to meet the minimum standard for his or her class will be required to withdraw unless the Committee on Academic Standards takes action otherwise. Procedures to qualify for re-admission are found on pages 15 and 152.

A non-matriculated student must meet the same minimum standards as are required of a matriculated student. The number of courses a non-matriculated student has taken will determine class equivalence; a student must meet the minimum standard for that class in each successive two-semester block of work, regardless of the number of courses involved. A student who fails to meet the minimum standard will be required to withdraw unless the Committee on Academic Standards takes action otherwise. Formal readmission to the College and/or permission to take courses may be granted only after approval has been granted by the Committee on Academic Standards.

GRADES IN YEAR COURSES: To be admitted to the second semester of a year course (a hyphenated or an asterisk course) the student must have attained a passing grade in the work of the first semester. Students who do not pass 101 Language courses and 113 Music courses will receive failing grades.

SENIOR-UNSATISFACTORY GRADE IN COURSE: A final semester senior who does not receive credit for a course only because of a failure in a final examination may apply for one reexamination in each such course, provided the failure is not due to dishonesty. After successful reexamination, a new course grade may be recorded which will be no higher than the minimum passing grade in the applicable grading system. If a reexamination is allowed, it shall be conducted by a committee appointed by the chairman of the department in which the failure occurred and shall be conducted within ten (10) days of the date of the original examination except when an extension is granted by the College Committee on Academic Standards.

CANCELLATION OF GRADE AND CREDIT: Any student who takes courses at Dickinson while in high school or in the summer after high school graduation and who then matriculates at Dickinson is allowed to cancel the grade and the credit received in, at most, two courses taken at Dickinson during that period. This in no way prevents a student from registering again for any course so canceled. Students should make the request for cancellation in writing to the Registrar no later than Roll Call of the second semester of matriculated status.


#### Abstract

AUDITING A student may audit a course without credit by obtaining the permission of the instructor and his adviser and then registering for it during the Drop/Add Period. Fee for auditing courses is one-half the course fee for part-time and non-matriculated students.

Courses taken as audits shall not appear on a student's transcript unless the instructor in question authorizes such an entry at the end of the semester. The instructor shall stipulate his or her expectations of all such auditors early in the semester.


## PASS/FAIL COURSE OPTION

All students, except first semester freshmen, have the option of taking one course each semester on a pass/fail basis. The purpose of the pass/fail option is to stimulate the students investigation of unfamiliar subjects in which they may be interested but lack confidence because of unfamiliarity with the approach to the subject matter. A student may not take more than a total of seven such courses out of the 34 required for graduation.
"Pass" is defined as work of a quality earning a grade of at least C and "fail" is defined as work of a quality earning a grade of D or F. Courses taken under the pass/fail option are not counted in the student's cumulative grade point average. The student must satisfy the same requirements for the course expected of a regularly enrolled student.

A student may enroll in a course on a pass/fail basis with approval from his or her advisor at the time of registration and may change the grading status during the add/drop period. Instructors or departments may identify certain courses that cannot be taken with the pass/fail option or may deny the pass/fail registration to declared majors or minors in any course required by that department. A list of courses that cannot be taken pass/fail is available at registration. No course is offered which must be taken pass/fail.

## INCOMPLETE GRADES

A grade of Incomplete may be reported only in cases in which illness or other serious emergency has prevented the student from completing the work for the marking period. No incomplete shall be in effect until a form has been filed with the Registrar which briefly states the reasons under which it has
been granted, contains an evaluation of the student's work to the date of the Incomplete, and is signed by both student and instructor. An Incomplete may not be reported because of negligence or procrastination on the part of the student. A grade of Incomplete may be reported only if the student has done satisfactory work in the completed portion of the course. An incomplete grade at the end of a semester shall be cleared before the Roll Call of the following semester unless exception is granted by the Committee on Academic Standards. In every case, the Incomplete must be cleared before the end of the second semester following. If an Incomplete has not been cleared within stipulated time limits, the appropriate 'grade' indicating a lack of satisfactory completion will be recorded.

## HONORS UPON GRADUATION

A student who in his total program at Dickinson College attains an average of at least 3.75 shall be awarded his degree summa cum laude.

A student who in his total program attains an average of at least 3.50 but less than 3.75 shall be awarded his degree magna cum laude.

A student who in his total program attains an average of at least 3.25 but less than 3.50 shall be awarded his degree cum laude.



## LECTURESHIPS, ENDOWED PROGRAMS AND AWARDS

THE JAMES HENRY MORGAN LECTURESHIP. This lectureship is endowed by funds set aside by the Board of Trustees in 1929 in grateful appreciation for the distinguished service of James Henry Morgan of the Class of 1878: Professor of Greek, 1884-1914; Dean, 1903-14; and President of the College, 1914-28. On two subsequent occasions, 1931-32 and 1933-34, Dr. Morgan again served as interim President. The Board's action calls for the income from the James Henry Morgan Lectureship Fund to be used by the President of the College "for the procurement of one or more special lectures annually upon such subject or subjects as he may deem wise, ..." More recently the lectureship has been filled on an annual basis by a scholar-inresidence for a period of three to five days, meeting informally with individuals and class groups and lecturing on a topic with emphasis on the disciplines of Social Sciences and Humanities. The recipient is selected by a committee appointed by the President of the College with representatives from these disciplines.

The most recent Morgan Lecturer was philosopher Paul Ricoeur. Over a period of weeks prior to his four-day campus visit, a series of all-College seminars on Ricoeur's thought were held. Because of this advanced preparation, the several meetings with Ricoeur in small and large groups as well as by individuals were unusually exciting for the Dickinson community.

THE BOYD LEE SPAHR LECTURES IN AMERICANA. This lectureship was established in 1947 in recognition of the importance of Dickinson College and its graduates in the large history of American culture, and was named in honor of Boyd Lee Spahr, A.M., LL. D., D.C.L., of the Class of 1900, in grateful appreciation of his continuous interest in the Dickinson College Library and of his numerous contributions to historical collections.

THE GLOVER MEMORIAL LECTURES. This lectureship in science was established in 1958 in memory of John Glover of New Castle on Tyne, England, the inventor of the Glover Tower, and in memory of his son and grandson, Henry and Lester Glover, by the late Dr. John D. Yeagley and by Mrs. Yeagley of York, Pennsylvania.

THE STELLA LaZELLE BARNHART MEMORIAL FUND FOR THE CHAPLAINCY. Established in 1974 by a special endowment gift from the estate of the late Stella LaZelle Barnhart of Chicago, Illinois. The income provided by this endowment is used to sustain permanently the extra-curricular programs of campus ministry administered by the Office of the Chaplain at Dickinson College.

THE DICKINSON COLLEGE ARTS AWARD. Initiated by the Faculty of the College and endowed in 1959 by gifts from members of the Board of Trustees in honor of William W. Edel, President of the College from 1946 to 1959. The Award takes the form of a Wedgwood medallion after a sculpture created by Nancy Dryfoos, distinguished American sculptress, and bearing the likeness of former President Edel. The medallion was cast especially for Dickinson College by the Wedgwood Potteries of Barlaston, England. In addition to the Wedgwood medallion, the recipient of the award receives an honorarium. The Arts Award is given to an individual who has made an outstanding contribution in the creative or performing arts. Beginning with the 1974-75 academic year, the recipient is expected to be in residence for a three to four-day period of interaction with the College community. Since its establishment, Arts Award recipients have been: Robert Frost, 1958-59, Poetry; Eero Saarinen, 1959-60, Architecture; Judith Anderson, 1960-61, Theatre; Leonard Baskin, 1963-64, Graphic Arts; Walter Piston, 1965-66, Music; W. H. Auden, 1967-68, Poetry; John Cage, 1969-70, Music; The Philadelphia Orchestra, 1972-73, Music; Mauricio Lasansky, 1974-75, Printmaker.

THE PRIESTLEY AWARD. Given each spring during the Joseph Priestley Celebration when the College's collection of Priestley apparatus and memorabilia are put on special display. The Award is presented in memory of Joseph Priestley, discoverer of oxygen, to a distinguished scientist for his discoveries
or for his contributions to the welfare of mankind. A draft for one thousand dollars and a Priestley Medallion, a ceramic struck from the original moulds made in 1775 by the first Josiah Wedgwood after a pen and ink sketch of Priestley by John Flaxman, constitute the Award. The recipient of the Award is selected by the President of the College from a slate of nominees submitted by a commission consisting of former Priestley Award recipients and others associated with the Award since its establishment in 1952. Recipients of the Priestley Award have been:

1952 Sir Hugh Stott Taylor, Dean of the Graduate School, Princeton University.
1953 Paul R. Burkholder, of the Class of 1924, Osborne Professor of Botany at Yale University, Discoverer of Chloromycetin.
1954 Karl T. Compton, Chairman of the Corporation, Massachusetts Institute of Technology.
1955 Harold C. Urey, University of Chicago. Nobel Prize Laureate in Chemistry 1934.
1956 Detlev W. Bronk, President, Rockefeller Institute for Medical Research.
1957 Edward Teller, General Advisory Committee, Atomic Energy Commission.
1958 George Bogdan Kistiakowski, Abbott and James Lawrence Professor of Chemistry, Harvard University.
1959 Willard Frank Libby, Member, Atomic Energy Commission. Nobel Prize Laureate in Chemistry 1960.
1960 Glenn T. Seaborg, Chancellor and Professor of Chemistry, University of California. Nobel Prize Laureate in Chemistry 1951.
1961 Maurice Ewing, Director, Lamont-Doherty Geological Observatory of Columbia University.
1962 Robert W. Woodward, Donner Professor of Science, Harvard University. Nobel Prize Laureate in Chemistry 1965.
1963 Kenneth S. Pitzer, President, Rice University.
1964 Isador I. Rabi, Higgins Professor of Physics, Columbia University. Nobel Prize Laureate in Physics 1944.
1965 Joel H. Hildebrand, Professor of Chemistry Emeritus, University of California, Berkeley.
1966 Charles H. Townes, Provost, Massachusetts Institute of Technology. Nobel Prize Laureate in Physics 1964.
1967 George W. Beadle, President, University of Chicago. Nobel Prize Laureate in Medicine 1958.
1968 Marshall W. Nirenberg, Chief of the Laboratory of Biochemical Genetics, National Heart Institute.
1969 Linus C. Pauling, Research Associate, California Institute of Technology. Nobel Prize in Chemistry 1954. Nobel Peace Prize 1962.

1970 George Wald, Higgins Professor of Biology, Harvard University, Co-Recipient, Nobel Prize for Medicine 1967.
1971 Margaret Mead, Curator Emeritus of Ethnology, American Museum of Natural History.
1972 George C. Pimentel, Professor of Chemistry, University of California, Berkeley.
1973 Philip H. Abelson, President of the Carnegie Institute of Washington and Editor of Science, Co-discoverer of Neptunium.
1974 Henry Eyring, Dean Emeritus of the Graduate School, Department of Chemistry, University of Utah, Salt Lake City.
1975 Carl Sagan, Professor of Astronomy and Space Sciences, Cornell University.
1976 John G. Kemeny, President of Dartmouth College.

THE GANOE AWARD. The Constance and Rose Ganoe Memorial Fund established in 1969 in accordance with the testamentary wishes of the late William A. Ganoe of the Class of 1902 provides that an award be given annually to that Professor of Dickinson College who, by secret ballot of the members of the senior class immediately prior to their graduation, shall have been voted the most inspirational teacher during their entire college course. The Award consists of a cash honorarium of $\$ 1,000$ plus funds to be used at the discretion of the professor for the enrichment of his teaching at Dickinson. The Most Inspirational Teacher for the Class of 1976 was Professor William B. Jeffries of the Department of Biology.

Previous Ganoe Award recipients are so identified in the Faculty Section beginning on page 181 .

THE LINDBACK AWARD. Instituted by the trustees of the Christian R. and Mary F. Lindback Foundation, the Lindback Distinguished Teaching Award is the highest honor the College bestows on members of its faculty. Selected by the President, the Lindback Award recipient receives an honorarium of not less than five hundred dollars and not more than one thousand dollars. The Lindback Foundation further awards one thousand dollars in scholarships to deserving students who can meet certain basic standards. The Lindback Distinguished Teaching Award for 1975-76 was presented to Professor Howard C. Long of the Department of Physics.

Previous Lindback Award recipients are identified as such in the Faculty Section beginning on page 181.

## ENDOWED AND NAMED CHAIRS

The College has a number of endowed and named chairs. The holders of these chairs are elected by the Board of Trustees and the chairs which they hold are indicated in the faculty list. The endowed chairs are as follows:

THE LEMUEL T. APPOLD FOUNDATION, endowing the chair of the President of the College, was established by the Board of Trustees from a part of the bequest of Lemuel T. Appold of Baltimore, Maryland, of the Class of 1882 and a generous benefactor of the College.

THE ROBERT COLEMAN CHAIR OF HISTORY. The bequest of Robert Coleman, Esq., of Lancaster, Pennsylvania, was designated by the Board of Trustees in 1828 for the endowment of professorship, making this one of the oldest American professorships.

THE THOMAS BEAVER CHAIR OF ENGLISH LITERATURE was endowed by Thomas Beaver, Esq., of Danville, Pennsylvania, in 1899.

THE ASBURY J. CLARKE CHAIR OF LATIN was established in 1919 by the gift of the widow of Asbury J. Clarke, of the Class of 1863.

THE SUSAN POWERS HOFFMAN CHAIR OF MATHEMATICS was endowed in 1923 and named in memory of Susan Powers Hoffman, of Carlisle.

THE RICHARD V. C. WATKINS CHAIR OF PSYCHOLOGY was endowed in 1928 by the bequest of Richard V. C. Watkins, of the Class of 1912.

THE MARTHA PORTER SELLERS CHAIR OF RHETORIC AND THE ENGLISH LANGUAGE is an endowed professorship established in 1936 by a gift of her son, the late Professor Montgomery Porter Sellers, of the Class of 1893.

THE BOYD LEE SPAHR CHAIR OF AMERICAN HISTORY was endowed in 1949 by the gift of Boyd Lee Spahr, of the Class of 1900.

THE GEORGE HENRY KETTERER AND BERTHA CURRY KETTERER CHAIR OF RELIGION was endowed in 1949 by the gifts of George Henry Ketterer, of the Class of 1908 , and his wife, Bertha Curry Ketterer.

THE ROBERT BLAINE WEAVER CHAIR OF POLITICAL SCIENCE was endowed by the bequest of Laura Davidson Weaver, and named for her brother, Robert Blaine Weaver, of the Class of 1874.

THE C. SCOTT ALTHOUSE CHAIR OF CHEMISTRY was established in 1950 and named for C. Scott Althouse, a trustee of the College.

THE ALFRED VICTOR DUPONT CHAIR OF CHEMISTRY, named for Alfred Victor duPont, a student at the College, 1814-16 was established in 1950 by the gift of his grandson, the late Irénéé duPont, of Wilmington, Delaware.
THE THOMAS BOWMAN CHAIR OF RELIGION was endowed in 1951 by the gift of the Kresge Foundation (Sebastian S. Kresge, L.H.D., Founder), and named for Thomas Bowman of the Class of 1837, the first graduate of Dickinson College to be elected a Bishop of the Methodist Episcopal Church.

THE JOSEPH PRIESTLEY CHAIR OF NATURAL PHILOSOPHY was established in 1959 by gifts of William H. Baker and S. Walter Stauffer in memory of Salome Baker Stauffer.
THE WILLIAM W. EDEL CHAIR IN THE HUMANITIES was endowed in 1959 by the gift of Merle W. Allen, a College trustee, and his wife, Elizabeth Frederick Allen, "in recognition and commemoration of Dr. Edel's outstanding leadership as President of the College from 19461959."

THE JAMES HOPE CALDWELL MEMORIAL CHAIR was endowed in 1966 by the bequest of Mr. and Mrs. James Hope Caldwell.

THE HENRY LOGAN CHAIR OF ECONOMICS was established in 1967 by the gift of Henry Logan of the Class of 1910.
THE RUSSELL I. THOMPSON CHAIR OF THE DEAN OF THE COLLEGE was established in 1967 by the gift of Ethel Wright Thompson.
THE GEORGE W. PEDLOW, CLASS OF 1901, CHAIR OF EDUCATION established in 1972 in memory of his father by C. Wesley Pedlow, Jr., of the Class of 1934.


THE GLENN E. AND MARY L. TODD CHAIR established in 1973 by bequests of Glenn E. Todd, Class of 1912, and Mary Line Todd, Class of 1923.

THE CHARLES A. DANA PROFESSORSHIP PROGRAM established in 1968 by a matching grant of $\$ 250,000$ from the Charles A. Dana Foundation. The income from this fund is to be used annually to subsidize the salaries of four Dana Professors in varying amounts but in excess of the average salary for full professors at the time of appointment.
THE GEORGE METZGER ENDOWMENT FUND, held in trust by the Trustees of the Fund, the income therefrom paid annually to Dickinson College at the discretion of the Trustees of the George Metzger Endowment Fund to endow the chair of the Dean of Women at Dickinson College.

The George Metzger Endowment Fund was established in 1963 by the Metzger College Trustees in memory of George Metzger of the Class of 1798 of Dickinson College who made a testamentary provision for the establishment of a college for the education of young women after his death. By action of the Board of Trustees of Metzger College in 1913, use of the Metzger College building, Metzger Hall, was granted to Dickinson College as a residence hall for women students. Fifty years later, Dickinson relinquished its use of Metzger Hall, the property was sold, and the proceeds used to establish the George Metzger Endowment Fund.

## HONOR SCHOLARSHIPS AND PRIZES

## FOR GENERAL EXCFILLENCE

THE CLASS OF 1902 AWARD. Awarded to that member of the junior class who, by vote of his or her classmates, has contributed most to the College.
THE HUFSTADER SENIOR PRIZES. Endowed by Dr. William F. Hufstader. Awarded to the senior man and woman who, in the judgment of the President of the College, have contributed most to the good of the College.

## FOR SCHOLASTIC EXCELLENCE

The College Committee on Academic Standards has the responsibility of recommending recipients of these awards to the Faculty. The Committee has established as a guideline for eligibility for the various class awards the following: completion of six, twelve, eighteen, or twenty-four Dickinson courses with a final letter grade in order to be eligible for Freshman, Sophomore, Junior, or Senior awards, respectively.
THE WILLIAM K. DARE HONOR SCHOLARSHIP. Endowed by Lemuel T. Appold, Esq. '82. Awarded to that male student of the freshman, sophomore or junior class who has attained the highest scholastic average in the work of the previous year.

THE JAMES FOWLER RUSLING PRIZE. Awarded to a graduating senior who excels in scholarship.

THE DELAPLAINE McDANIEL PRIZES. Awarded to two members of the
freshman class and to one member of the sophomore class for excellence in scholarship.
THE JOSEPH MIDDLETON AND ISABEL MULLIN BURNS MEMORIAL PRIZE. Endowed by Helen Burns Norcross '12, former Dean of Women. Awarded to the woman student attaining the highest scholastic average during the sophomore year.
THE ALICE AND F. CHAPLINE MOOREHEAD-BARBARA ELDER TIMBERLAKE AWARD. Endowed as a memorial by Caroline Moorehead Elder. Awarded to that student who submits the best piece of verse.

THE JOHN PATTON MEMORIAL PRIZES. Endowed by the Honorable A. E. Patton as a memorial to his father. Awarded for high scholastic standing to a member of each college class.

SOPHISTERS. By action of the Board of Trustees, and in keeping with an old Dickinson tradition, the highest ranking junior is named Senior Sophister for his or her final year in College, while the highest-ranking sophomore is named Junior Sophister for the following year. The distinction of Senior and Junior Sophister carries with it a $\$ 500$ prize.

## FOR EXCELLENCE IN SPECIAL FIELDS

THE WILLIAM LENNOX AVIS PRIZE IN U. S. HISTORY. Endowed by Minnie Woods Avis.
THE BAIRD BIOLOGY PRIZES. In honor of Spencer Fullerton Baird, Dickinson's most outstanding alumnus in the field of Biology. Awarded to two senior Biology majors who excel in Biology and show promise for future achievement in the field of Biology (broadly defined).
THE HENRY P. CANNON MEMORIAL PRIZE. Endowed by the Trustees. Awarded to a member of the sophomore class who excels in Mathematics.
THE CHI OMEGA PRIZE. The gift of the Dickinson Chapter. Awarded to a junior or senior woman who excels in Economics, Political Science, Sociology, or Psychology.
THE CAROLINE HATTON CLARK MATHEMATICS SCHOLARSHIPS.
THE C. W. FINK MEMORIAL ECONOMICS PRIZE.
THE CLASS OF 1875 PRIZE. Endowed in memory of John H. Ahl, Class of 1875, by his son, John C. Ahl. Awarded to the senior who compiles the highest average in Economics.

THE CLASS OF 1914 PRIZE. Endowed in memory of John C. Ahl. Awarded to that member of the senior class who excels in American History.

THE FORREST E. CRAVER MEMORIAL MATHEMATICS PRIZE. Awarded to a member of the junior class.
THE MERVIN GRANT FILLER MEMORIAL PRIZE. Endowed by Tolbert J. Scholl. Awarded for excellence in the Classical Languages.

THE GANOE PRIZE IN INTERNATIONAL STUDIES. Awarded to the senior achieving highest honors in International Studies.

THE GOULD MEMORIAL DRAMA PRIZES. Provided by Dr. Herbert M. Gould in memory of his father and mother.

THE CHARLES MORTIMER GRIFFIN PRIZE. Awarded to a member of the senior class for excellence in Religion.

THE WILBUR HARRINGTON AND HELEN BURNS NORCROSS PRIZE. Awarded for excellence in Psychology during the junior year.

JEANNETTE HOLZSHU MEMORIAL PRIZE IN AMERICAN LITERATURE.
THE CAROLINE KENNEDY FRENCH LITERATURE PRIZE. Endowed by friends. Awarded annually to a student who reads French easily and who takes delight in French Literature.

THE WILLIAM W. LANDIS MEMORIAL PRIZE IN MATHEMATICS. Endowed by George G. Landis '20. Awarded to a member of the freshman class.

THE MARGARET McALPIN RAMOS AWARD. Awarded to a junior or senior Spanish major.

THE LANDIS-MOHLER PRIZE IN PHYSICS. Endowed by George G. Landis '20 in memory of Professor John Frederick Mohler, Professor of Physics, 1896-1930. Awarded to a member of the freshman class.

THE RUTH SELLERS MAXWELL SCHOLARSHIPS IN ENGLISH LITERATURE. Endowed by Robert H. Maxwell'15 in memory of his wife.

THE JOSEPH J. MYERS PRIZE. To be awarded annually to a varsity basketball player achieving academic excellence. Endowed in honor of Joseph J. Myers, Class of 1932, by his wife, Marie Moore Myers, and his brother, Charles E. Myers.

THE WELLINGTON A. PARLIN SCIENCE SCHOLARSHIP AWARD. Awarded to that junior majoring in Biology, Chemistry or Physics, who has, during three years at Dickinson, attained the highest scholastic average.

THE GAYLARD H. PATTERSON MEMORIAL PRIZE. Awarded to that student in Sociology who presents the best sociological analysis of a public policy.

THE PENNSYLVANIA INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS AWARD. Awarded to the outstanding accounting student.

THE MOR RIS W. PRINCE HISTORY PRIZE. Endowed by the Class of 1899.
THE WINFIELD DAVIDSON WALKLEY PRIZES. Endowed by D. R. Walkley, D.C.L., in memory of his son. Awarded to two members of the freshman class who excel in declamation, either forensic or dramatic.

THE ANGELINE BLAKE WOMER MEMORIAL PRIZE. Awarded each year to that member of the freshman class who attains the highest grade in rhetoric and composition.

THE AGNES STERRETT WOODS PRIZE. Awarded to a woman student for the best short story or essay.

JOHN DAVID WRIGHT, III MEMORIAL SCHOLARSHIP IN CLASSICAL LANGUAGES. To be awarded to a freshman studying Latin or Greek.


SCHOLARSHIPS
An abbreviated listing of endowed and unendowed scholarships follows. Complete descriptions of each, including restrictions, etc., are contained in the official records of the College and administered accordingly.

The endowment funds of the College are unitized and reflect fluctuations in the value of Dickinson's investments on a quarterly basis. For that reason, references to principal amounts and income have been omitted.

Dickinson is grateful for its alumni and friends who thoughtfully have provided scholarship funds to assist able young men and women whose personal and family resources are inadequate to meet the full cost of a Dickinson education.

## UNENDOWED SCHOLARSHIPS

THE CHARLES A. DANA SCHOLARSHIP PROGRAM. Established by The Charles A. Dana Foundation. Approximately fifteen renewable scholarships awarded annually to members of the sophomore class. Awards vary from an honorarium of $\$ 100$ to full tuition according to need. Dana Scholarships are among Dickinson's highest honors and are awarded on the basis of superior academic achievement and demonstrated leadership in the College community.
THE MARY DICKINSON CLUB SCHOLARSHIPS. Given to three students of high academic standing recommended by the Mary Dickinson Club. Renewal possible for more than one year.
THE LINDBACK SCHOLARSHIP PRIZE. Provided by the trustees of the Christian R. and Mary F. Lindback Foundation to help deserving students who are residents of New Jersey, Pennsylvania, Delaware, and Maryland, without regard to race or religious affiliation, who by reason of their scholastic attainment, character, personality, and all around ability, give great promise of benefiting therefrom and of being useful
and valuable citizens of their communities. The selection is not made on the basis of scholarship alone.

THE MYRL S. MYERS MEMORIAL SCHOLARSHIP. Provided by Alice Brown Myers in memory of her husband.
THE N. J. CONFERENCE OF THE UNITED METHODIST CHURCH SCHOLARSHIP. Provided by the Commission on Higher Education of the New Jersey Conference. Given to a student who has been a member of a United Methodist Church within the bounds of the Conference.

UNITED METHODIST SCHOLARSHIPS. Provided by the Board of Education of the United Methodist Church. Given to a student on recommendation from the pastor of the student's home church who has interest and experience in United Methodist activities, and attained high scholarship.

THE U.S. ARMY R.O.T.C. SCHOLARSHIPS. Awarded to outstanding sophomore Military Science students who desire a career as officers in the United States Army.

## ENDOWED SCHOLARSHIPS

THE LEO ASBELL MEMORIAL SCHOLARSHIP. Endowed by the Asbell family. Preference given to a resident of southern New Jersey.

## THE BALDWIN MEMORIAL CHURCH SCHOLARSHIP.

THE M. GRACE BECHTEL MEMORIAL SCHOLARSHIP. Awarded to a student preparing for the ministry of the Central Pennsylvania Conference of The United Methodist Church.
THE BODINE SCHOLARSHIP. Endowed by George I. Bodine, Jr., Esq.
THE GEORGE L. BROWN SCHOLARSHIP. Preference given first to male students from Middle Paxton Township, Dauphin County, Pa.; secondly, to male students from Susquehanna Township, Dauphin County, Pa.; and lastly, to other worthy and eligible male students.

THE CARLISLE CORPORATION SCHOLARSHIPS. Preference given to children of employees of Carlisle Corporation, then to residents of Carlisle or adjacent territory; and lastly to other eligible students.
CENTRAL PENNSYLVANIA UNITED METHODIST CONFERENCE SCHOLARSHIPS. To members of churches of the Central Pennsylvania Conference.
THE CLASS OF 1909 SCHOLARSHIP. Preference given to a descendant of the Class of 1909.

THE CLASS OF 1914 SCHOLARSHIP.
THE CLASS OF 1915 SCHOLARSHIP. Preference given to a descendant of the Class of 1915.

THE CLASS OF 1917 SCHOLARSHIP. Preference given to a descendant of the Class of 1917.

THE CLASS OF 1918 SCHOLARSHIP. Preference given to a descendant of the Class of 1918.
THE CLASS OF 1921 SCHOLARSHIP. Preference given to a descendant of the Class of 1921.
THE CLASS OF 1928 SCHOLARSHIP. Preference given to a descendant of the Class of 1928.
THE CLASS OF 1930 SCHOLARSHIP. Preference given to a descendant of the Class of 1930.
THE CLASS OF 1935 RED MALCOLM SCHOLARSHIP. Preference given to a descendant of the Class of 1935.
THE CLASS OF 1938 SCHOLARSHIP.
THE CLASS OF 1960 DR. GILBERT MALCOLM SCHOLARSHIP.
THE JOEL CLASTER MEMORIAL SCHOLARSHIP.
THE JOSEPH AND MARY STRONG CLEMENS SCHOLARSHIP. Endowed by Joseph Clemens. Awarded to students studying for the ministry of the United Methodist Church.
THECARRIE A. W. COBB SCHOLARSHIP. Endowed in memory of the Reverend Charles H. Rorer, D.D. Awarded to students preparing for the ministry.
THE JOHN O. COCKEY, JR. MEMORIAL SCHOLARSHIP. Endowed by John O. Cockey and Mrs. R. M. Sheridan.
THE MONCURE DANIEL CONWAY SCHOLARSHIP. Established by gift of Eleanor Conway Sawyer, granddaughter of Moncure Conway.
THE ELEANOR COOPER SCHOLARSHIP.
THE CORSON SCHOLARSHIPS. Endowed in honor of Bishop Fred P. Corson and Frances B. Corson by the Wyoming Conference of the United Methodist Church. Awarded to United Methodist students from the Wyoming Conference.
THE NATHAN DODSON CORTRIGHT MEMORIAL SCHOLARSHIP. Endowed by Mrs. Emma Cortright Keen. Awarded to a student preparing for the ministry.
THE MR. AND MRS. ROBERT B. DAVIES SCHOLARSHIP. Awarded to United Methodist students from Schuylkill County, Pennsylvania.
THE S. ADELBERT DELUDE SCHOLARSHIP. Preference given to a student from New York.
THE DICKINSON COLLEGE FRATERNITY SCHOLARSHIPS. Endowed by the alumni of the local chapters of the ten national fraternities represented on campus. The annual income from each of these separate fraternity funds is awarded with preference given to active members of the respective fraternities.
THE LUCY HOLT DONEY MEMORIAL SCHOLARSHIP. Endowed by Jean, Hugh and John Doney.
THE SMITH ELY SCHOLARSHIP. Preference given to students from New York

City and vicinity.
THE WILLIAM SCHUYLER EVES MEMORIAL SCHOLARSHIP. Preference given to male students preparing for the ministry.
THE FARMER'S TRUST COMPANY SCHOLARSHIP. Preference given to the son or daughter of an employee of the Farmer's Trust Company, Carlisle, Pa.
THE ROBERT M. FERGUSON, JR. MEMORIAL SCHOLARSHIP. Endowed by Grace C. Vale.
THE FIRST PRESBYTERIAN CHURCH, YORK, PENNSYLVANIA, SCHOLARSHIPS. Endowed by Henry Logan ' 10 to assist in educating qualified students from the Church or Presbytery.
THE E. HAROLD AND FLORENCE F. FRANTZ SCHOLARSHIP. Established by Mr. and Mrs. Frantz, is awarded to a freshman man or woman. Selection is based on evidence of sound character and intellectual promise and also on potential for service to Dickinson and the wider community.

THE FREEMAN SCHOLARSHIP. Endowed by Frank A. Freeman, Esq.
THE MELVILLE GAMBRILL MEMORIAL SCHOLARSHIP. To provide for young men preparing for the ministry.

THE JOHN GILLESPIE MEMORIAL SCHOLARSHIP. Endowed by Miss Kate S. Gillespie as a memorial to her father.

## THE M. BRANDT GOODYEAR SCHOLARSHIP.

THE EDNA GRACE GOODYEAR MEMORIAL SCHOLARSHIP. Endowed by Samuel M. Goodyear, a former Trustee of the College. Preference given to students from Carlisle, Pa.; secondly, to students from Cumberland County, Pa.; and lastly, other eligible students.

THE JOHN H. HACKENBERG SCHOLARSHIP. Awarded to a student preparing for the United Methodist ministry.

THE HERBERT G. AND NELLE P. HAMME SCHOLARSHIP. Preference given to foreign students studying at Dickinson College.

THE HAVERSTICK AND SNAVELY SCHOLARSHIP.
THE J. FRED HEISSE SCHOLARSHIP. Endowed by his brother, E. W. Heisse.
THE HONORABLE E. FOSTER HELLER SCHOLARSHIP. Endowed by Anna C. Halsey. Awarded to male students requiring funds to continue their Dickinson education.

THE HORN SCHOLARSHIP. Endowed by J. Edward Horn.

## THE BRUCE HUGHES SCHOLARSHIP.

THE WILLIAM ALBERT HUTCHISON MEMORIAL SCHOLARSHIP. Endowed by the Conway Hall Alumni Association. Preference given to descendants of former students of Conway Hall.

THE BENJAMIN D. JAMES SCHOLARSHIPS. Established by Mr. and Mrs. Robert J. Wise in honor of Dr. James, a member of the College facuity since 1941.

THE CHARLES H. B. KENNEDY MEMORIAL SCHOLARSHIP. Endowed by members of the "D" Club.

THE LEONA B. KLINE AND SIDNEY D. KLINE SCHOLARSHIP. Awarded with preference to entering students who have formally declared their intent to pursue a profession of ordained ministry in a Protestant religious denomination. Grants are renewable for the sophomore, junior and senior years providing the recipient continues his preparation for the ministry.

THE DAVID R. SIEBER-IRVING E. KLINE-MABEL SIEBER KLINE SCHOLARSHIP.

LAFAYETTE AVENUE PRESBYTERIAN CHURCH, BROOKLYN, NEW YORK, SCHOLARSHIP. Endowed by Henry Logan ' 10 to assist in educating a qualified student from the Church or Presbytery.
THE MERKEL LANDIS SCHOLARSHIP. Preference given to students from Carlisle, Pa.; secondly, to students from Cumberland County, Pa.; and lastly, other eligible students.

THE ALBANUS CHARLES LOGAN MEMORIAL SCHOLARSHIP. Endowed by Maria Dickinson Logan. Preference given to a male graduate of Germantown High School.

## THE HENRY LOGAN SCHOLARSHIPS.

THE GEORGE LANE LOW SCHOLARSHIP. Endowed by Miss Elizabeth A. Low ' 91 , in memory of her brother, to aid deserving students, with preference to be given to students residing in Columbia County, Pennsylvania.

THE JOHN B. LUCAS SCHOLARSHIP. To assist a freshman student from Wilmington, Delaware. Preference given to the son or daughter of an employee of the Penn-Central Co. or the Atlas Powder Co.

THE RICHARD H. McANDREWS SCHOLARSHIP. Endowed by the wearers of the "D" in memory of Associate Professor Emeritus R. H. McAndrews of the Department of Physical Education.

THE CHARLES WATSON McKEEHAN SCHOLARSHIP. Endowed by Mary A. McKeehan and Charles L. McKeehan in memory of their husband and father, a Trustee of the College, 1879-95.

THE BESSIE McCULLOUGH MEMORIAL SCHOLARSHIP. Endowed by her husband.

THE ANTHONY MACH MEMORIAL SCHOLARSHIP. Preference given to a student entering his final year of studies in Economics.
C. H. MASLAND \& SONS SCHOLARSHIPS. Preference given to sons and daughters of employees of C. H. Masland \& Sons, Carlisle, Pa. and then to residents of Carlisle or adjacent territory, and lastly to other eligible students.

THE MAY MEMORIAL ASSOCIATION SCHOLARSHIP. Endowed in memory of Joseph M. and Aimee L. May. Preference given to students from the Greater New York area.

THE BISHOP WILLIAM VERNON MIDDLETON SCHOLARSHIP. Endowed by the Claude Worthington Benedum Foundation. Preference given to students from West Virginia and Western Pennsylvania.

THE ARTHUR MILBY SCHOLARSHIP. Endowed by Miss Mary R. Burton. Preference given to young men preparing for the ministry.

THE THEODORE F. MILLER SCHOLARSHIP.
THE WILLIAM VAN AXEN MILLER MEMORIAL SCHOLARSHIP FUND. Established in 1968 by his parents, Mr. and Mrs. Edward A. Miller.

THE ROY W. MOHLER SCHOLARSHIP. Endowed by his former students at Jefferson Medical School and others. Given in the second semester of the senior year to that student with the greatest need who has been accepted for admission to medical school the following year.

THE MONAGHAN PRESBYTERIAN CHURCH, DILLSBURG, PENNSYLVANIA, SCHOLARSHIPS. Endowed by Henry Logan '10 to assist in educating qualified students from the Church or Presbytery.

THE THOMAS MONTGOMERY SCHOLARSHIP. Endowed by Colonel Robert H. Montgomery, LL.D., in memory of his father.

THE MARLIN E. OLMSTED SCHOLARSHIPS. Endowed by Mrs. Vance C. McCormick in memory of her husband, an honorary alumnus of the College.

THE CHARLES E. PETTINOS SCHOLARSHIP. Endowed by the Charles E. and Joy C. Pettinos Foundation in memory of Mr. Pettinos, a former College Trustee.

## THE READER'S DIGEST FOUNDATION SCHOLARSHIP.

THE ERNEST C. AND MIMA J. REISINGER SCHOLARSHIP. Endowed by Reisinger Brothers, Inc., Carlisle, Pa. Preference given to sons and daughters of employees of Reisinger Brothers, Inc.

THE ROBERT F. RICH MEMORIAL SCHOLARSHIPS. Endowed by Robert F. and Patti Rich and the Woolrich Woolen Mills with preference given to children of Woolrich Woolen Mills employees.

THE HORACE ELTON ROGERS SCHOLARSHIP. Endowed by his friends in honor of his devoted service to his alma mater. Awarded to a student majoring in the physical sciences, with preference given to young men and women majoring in chemistry.

THE HOWARD LANE RUBENDALL SENIOR SCHOLARSHIP. Established by Wheel and Chain and Omicron Delta Kappa in honor of Dr. Howard Lane Rubendall, President of the College, 1961-75. Endowed by students and friends. Awarded annually, at the discretion of the President, to a rising senior on the basis of superior academic achievement and demonstrated leadership in the College community.

THE RUBENDALL SCHOLARS PROGRAM. Established in 1975 in honor of Dr. Howard Lane Rubendall, President of the College, 1961-75. Endowed by friends and alumni in recognition of his commitment to students. Rubendall Scholarships are available to incoming freshmen and may be held by a student throughout his or her career at the College. Awarded on the basis of outstanding academic ability with first consideration to applicants who have the greatest financial need.

THE MARY SACHS SCHOLARSHIP. Endowed by the Trustees of the Estate of Miss Mary Sachs.

THE WILMER WESLEY SALMON SCHOLARSHIPS. Endowed by Cora Belle Salmon in memory of her husband, a Trustee of the College, 1913-31.
THE VALERIE SCHALL SCHOLARSHIP. Preference given to students preparing for the United Methodist ministry.

## THE CHARLES T. SCHOEN SCHOLARSHIPS.

THE ARNOLD BISHOP AND MARY AGNES SHAW SCHOLARSHIP. Endowed by Miss Clara W. Shaw, Mrs. Bertha Shaw Nevling, Mrs. Jeanne Shaw Bailey, Calvin Bishop Shaw and Charles M. Shaw.
THE JAMES ROSS SNOWDEN SCHOLARSHIP. Endowed by Mary T. Snowden Stansfield in memory of her father. Preference given to a student pursuing a legal career.

THE MARY ANN OCKER SPITAL SCHOLARSHIP. Preference given to a student preparing for the ministry or a related career.

THE WILLIAM M. STAUFFER SCHOLARSHIP.
THE CAPTAIN JOHN ZUG STEESE SCHOLARSHIP. Endowed by Mrs. Anna Zug Schaeffer Steese. Given to an upperclassman who has excelled in Mathematics and in service to the College.
THE MARTIN VAN BLARCOM SCHOLARSHIP. Preference to be given to a resident of Westchester County, New York.
THE MOSES VAN CAMPEN CHAPTER D.A.R. SCHOLARSHIP. Endowed by Miss Elizabeth A. Low. Preference given to students from Columbia County, Pa.
THE JULIA VAN DUSEN SCHOLARSHIP. Endowed by Henry Logan '10. Preference given to residents of the Greater New York City area.
THE ALBERT AND NAOMI WATSON SCHOLARSHIP. Preference given to a student from Carlisle.

THE M. WILLIAM WEDELL SCHOLARSHIP. Endowed by Meta Hofer in memory of her brother.
THE M. HELEN LEHMAN WHITMOYER MEMORIAL SCHOLARSHIP. Endowed by Raymond B. Whitmoyer ' 13 in memory of his wife.

## THE ELLA STICKNEY WILLEY SCHOLARSHIP.

THE ANNIE WINDOLPH SCHOLARSHIP. Awarded to a student or students preparing for a career in dentistry.

THE ROBERT J. AND JOANNE HARDICK WISE SCHOLARSHIPS.
THE REVEREND WILLIAM WOOD SCHOLARSHIP. Endowed by Miss Sarah Wood.

THE HELEN KISNER WOODWARD SCHOLARSHIPS. Endowed by Helen Kisner Woodward '08.

THE HUGH B. WOODWARD SCHOLARSHIPS. Endowed by the Hugh B. Woodward '08 and Helen K. Woodward '08 Trust.

THE EMMELINE MATILDA VAN RENSSELAER YARD MEMORIAL SCHOLARSHIPS. Endowed by John L. Yard, in memory of his wife. Preference given to students preparing to enter the ministry.

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Sam A. Banks, A.B., M.Div., Ph.D., Litt.D. President of the College

## Life Members

First
Elected

1961 Rolland L. Adams, LL.D.
1965 Carl P. Clare, B.Sc.,D.Sc.
1959 C. Wendell Holmes, A.B., A.M.

Palm Beach, Fla.
Park Ridge, Ill.
Cape May Court House, N.J.

1945 Sidney D. Kline, A.B., A.M., J.D., LL.D.
Reading
1958 Edward G. Latch, A.B., B.D., A.M., D.D., L.H.D. Gaithersburg, Md.
1953 Henry Logan, A.B., A.M., LL.B. Ormond Beach, Fla.
1967 John-Wesley Lord, A.B., B.D., D.D., LL.D., S.T.D., H.H.D.
Silver Spring Md.
1959 John B. Peters, Ph.D.
1952 Robert E. Woodside, A.B., J.D., LL.D.
Gardners
Harrisburg

## Term Expires 1977

1952 Carl C. Chambers, B.S., Sc.D., D.Sc.
Hawley
1973 *Marion Darragh Faucett, A.B.
1974 William S. Masland, A.B.
1969 John W. McConnell, A.B., Ph.D., D.Sc.
1969 E. Donald Shapiro, A.B., LL.B.
1975 Jack M. Stover, A.B., J.D.
1948 Robert A. Waidner, A.B., LL.B.
1976 Samuel W. Witwer, Jr., B.A., LL.B.
1966 Harry C. Zug, A.B., M.B.A.

East Stroudsburg
Carlisle Trumansburg, N.Y.

Short Hills, N.J.
Hershey
Baltimore, Md.
Chicago, Ill.
Haverford

## Term Expires 1978

1961 Sherwood M. Bonney, A.B., LL.B.
1970 *John D. Hopper, A.B., J.D.
1958 William S. Jenkins, Ph.B., LL.B.
1966 C. Law McCabe, B.S., M.S., D.Sc., Sc.D.
Phoenix, Ariz.
Camp Hill

1954 W. Gibbs McKenney, Ph.D., J.D., LL.D.
1965 James R. Shepley, Litt.D.
1962 Boyd L. Spahr, Jr., A.B., LL.B.
Frostburg, Md.
Kokomo, Ind.
Baltimore, Md.
New York, N.Y.
Blue Bell
1975 F. Thomas Trotter, B.A., D.D., S.T.B., Ph.D. Nashville, Tenn.
1948 Samuel W. Witwer, Ph.B., J.D., L.H.D., S.J.D., LL.D.
Kenilworth, IIl.

## Term Expires 1979

1967 Robert W. Chilton, A.B. Carlisle
1959 John M. Davidson, A.B., Ed.M.
1958 Edward C. Raffensperger, Sc.B., M.D.
1965 Mary Ames Raffensperger, B.A., M.D., Sc.D.
Wayne
Philadelphia
1975 Bruce R. Rehr, A.B.
1971 *Vincent J. Schafmeister, Jr., A.B.
1974 Daniel J. Terra, B.S.
1974 John B. Warman, B.D.,Ed.M., D.D.
1976 Thomas V. Zug, Ph.B., LL.B. Philadelphia

Reading
Albany, N.Y.
Kenilworth, Ill.
Harrisburg
Haverford

## Term Expires 1980

1976* John H. Harris, B.S., M.D., M.Sc., D.Sc.<br>1965 John M. Hoerner, B.S., M.S., Sc.D.<br>1972 George L. Morrison, Jr., B.E., M.S.<br>1971 Alexander Rush, B.S., M.D.<br>1968 John S. Snyder, A.B.<br>1964 J. William Stuart, A.B.<br>1974 Frank K. Tarbox, A.B., LL.B.<br>1975 William S. Thomas

Carlisle<br>Atlanta, Ga.<br>Harrisburg<br>Radnor<br>Center Lovell, Maine<br>Lumberville<br>Philadelphia<br>Garden City, N.Y.

*Alumni Trustee

## FACULTY* 1976-1977

SAM A. BANKS
The President of the College, Lemuel T. Appold Foundation (1975).
A.B., Duke University, 1949; M.Div., Emory University, 1952; Ph.D., University of Chicago, 1971; Litt.D., The College of Charleston, 1976.
GEORGE ALLAN
Dean of the College, Russell I. Thompson Chair of the Dean of the College, Professor of Philosophy (1963).
B.A., Grinnell College, 1957; M.Div., Union Theological Seminary, 1960; Ph.D., Yale University, 1963. Lindback Award for Distinguished Teaching, 1968-1969.
JOHN H. LIGHT
Professor of Mathematics, Secretary of the Faculty (1959).
B.S., Lebanon Valley College, 1948; M.S. in Physics, The Pennsylvania State University, 1950; M.S., Eng. Mech., 1957.

## Retired Faculty**

WILLIAM W. EDEL
The President of the College, Emeritus (1946).
A.B., Dickinson College, 1915; A.M., 1919; D.D., 1935; S.T.B., Boston University, 1921; L.H.D., Keuka College, 1944; D.D., Hobart College, 1944; LL.D., Gettysburg College, 1949; LL.D., University of Pennsylvania, 1949; D.Hu., Boston University, 1950; J.U.D., Lebanon Valley College, 1956; F.I.A.L., 1959.
HOWARD L. RUBENDALL
The President of the College, Emeritus (1961)
A.B., Dickinson College, 1931; D.D., 1945; M.Div., Union Theological Seminary, 1937; L.H.D., Trinity College, 1957; LL.D., University of Pennsylvania, 1966; LL.D., Dickinson School of Law, 1966.

[^10]GEORGE SHUMAN, JR.
Vice President Emeritus (1935).
Ph.B., Dickinson College, 1937; LL.D., Lycoming College, 1958.
WELLINGTON A. PARLIN
Professor Emeritus of Physics (1930).
A.B., Simpson College, 1921; M.S., University of Iowa, 1922; Ph.D., Johns Hopkins University, 1929.

## HORACE E. ROGERS

Alfred Victor duPont Professor Emeritus of Analytical Chemistry (1925).
B.S., Dickinson College, 1924; M.S., Lafayette College, 1925; Ph.D., Princeton University, 1930. Lindback Award for Distinguished Teaching, 1962-1963.

WILLIAM D. GOULD
George Henry and Bertha Curry Ketterer Professor Emeritus of Philosophy and Religion (1937).
A.B., Wesleyan University, 1919; B.D., Garrett Biblical Institute, 1922; Ph.D., Boston University, 1929.

ELMER C. HERBER
Professor Emeritus of Biology (1929).
A.B., Ursinus College, 1925; A.M., University of Pennsylvania, 1929; Sc.D., Johns Hopkins University, 1941.

MARY B. TAINTOR
Professor Emerita of Romance Languages (1928).
A.B., Ripon College, 1911; A.M., Leland Stanford Jr. University, 1918.

## FRIEDRICH SANDELS

Professor Emeritus of German (1946)
Ph.D., University of Giessen, Germany, 1912.
WILLIAM SLOANE
Martha Porter Sellers Professor Emeritus of English (1946).
A.B., Hamilton College, 1932; M.A., Columbia University, 1933; Ph.D., 1947.

## RALPH SCHECTER

Thomas Beaver Professor Emeritus of English Literature (1922).
A.B., University of Illinois, 1916.

CHARLES C. SELLERS
Librarian Emeritus with rank of Professor, Historian of the College and Curator of Dickinsoniana (1949).
B.A., Haverford College, 1925; M.A., Harvard University, 1926; Litt.D., Temple University, 1957.
ARTHUR M. PRINZ
Professor Emeritus of Economics (1948).
Ph.D., University of Berlin, 1923. Lindback Award for Distinguished Teaching, 19651966.

## MILTON E. FLOWER

Robert Blaine Weaver Professor Emeritus of Political Science (1947).
A.B., Dickinson College, 1931; A.M., Columbia University, 1938; Ph.D., 1946.

DONALD T. GRAFFAM
Professor Emeritus of Psychology and Education (1952).
A.B., University of Redlands, 1926; A.M., University of Southern California, 1933; Ed.D., 1949.

HENRY L. YEAGLEY
The Joseph Priestley Professor Emeritus of Natural Philosophy, Professor Emeritus of Physics and Astronomy (1958).
B.S., The Pennsylvania State University, 1925; M.S., 1927; Ph.D., 1934.

AMOS B. HORLACHER
Professor Emeritus of English (1947).
A.B., Wesleyan University, 1926; D.D., 1943; S.T.B., Union Theological Seminary, 1929; M.A., Columbia University, 1952; Ed.D., 1957. Lindback Award for Distinguished Teaching, 1960-1961.

CAROLINE H. KENNEDY
Professor Emerita of Modern Languages (1948).
A.B., Birmingham-Southern College, 1926; M.A., Alabama University, 1930; Docteur D'Université, Université Laval, 1942.

## W. WRIGHT KIRK

Professor Emeritus of Modern Languages (1946).
A.B., University of Delaware, 1930; M.A., Middlebury French School, 1935; Ph.D., University of Illinois, 1955.
FLINT KELLOGG
Boyd Lee Spahr Professor Emeritus of History (1946).
A.B., Bard College of Columbia University, 1931; M.A., Harvard University, 1933;
L.H.D., Bard College, 1960; Ph.D., The Johns Hopkins University, 1963.

FRANCIS W. WARLOW
Professor Emeritus of English (1947).
A.B., The Johns Hopkins University, 1931; M.A., University of Pennsylvania, 1946; Ph.D., 1959.

MARGARET M. RAMOS
Professor Emerita of Modern Languages (1950).
A.B., Syracuse University, 1931; M.A., University of Tennessee, 1948.

## ROGER E. NELSON

Professor Emeritus of Mathematics (1949).
B.S., U.S. Naval Academy, 1922; M.A., Dartmouth College, 1946.

RAY H. CRIST
Professor Emeritus of Chemistry (1963).
A.B., Dickinson College, 1920; Sc.D., 1960; A.M., Columbia University, 1922; Ph.D., 1926.

RICHARD M. SIA
Professor Emeritus of Physics (1954).
B.S., Northwestern University, 1928; M.S., University of Chicago, 1932.

## HENRY J. YOUNG

Charles A. Dana Professor Emeritus of History (1957).
A.B., Franklin and Marshall College, 1932; Ph.D., The Johns Hopkins University, 1955.

## WILLIAM H. BENSON

Associate Professor Emeritus of Mathematics (1955).
B.S., U.S. Naval Academy, 1925; Graduate, U.S. Navy Post-Graduate School, 1934.

## ASA W. CLIMENHAGA

Associate Professor Emeritus of Education (1950).
A.B., Taylor University, 1919; M.A., Wittenberg University, 1940; Ed.D., Syracuse University, 1945.
HERBERT ROYCE
Associate Professor Emeritus of Modern Languages (1959).
Dr. rer. pol., University of Kaliningrad, 1926.
CORDELIA M. NEITZ
Associate Professor Emerita of Library Resources (1963).
B.S. in L.S., Syracuse University, 1931; M.S. in Ed., Temple University, 1968.

## ALFRED N. HARTSHORN

Associate Professor Emeritus of English (1958).
A.B., University of Rochester, 1932; A.M., 1957.

## Teaching Faculty

DENNIS P. AKIN

Professor of Fine Arts, Chairman of the Department of Fine Arts (1969).
B.F.A., University of Kansas, 1956; M.F.A., University of Colorado, 1958.

## GEORGE ALLAN

Professor of Philosophy, Dean of the College, Russell I. Thompson Chair of the Dean of the College, (1963).
B.A., Grinnell College, 1957; M.Div., Union Theological Seminary, 1960; Ph.D., Yale University, 1963. Lindback Award for Distinguished Teaching, 1968-1969.
BRUCE R. ANDREWS
Professor of Political Science (1960).
A.B., Syracuse University, 1950; Ph.D., 1961.

## PAUL F. M. ANGIOLILLO

Professor of French Language and Literature (1962).
A.B., Columbia University, 1938; A.M. in French, Columbia University, 1939; Ph.D., 1946; Postdoctoral Studies, University of Geneva, 1946-47; Officier d'Académie, 1956; Officier des Palmes Académiques, 1961. Lindback Award for Distinguished Teaching, 1964-1965. Ganoe Award for Inspirational Teaching, 1974-75.

THOMAS M. AUSTIN
Instructor of Psychology (1975).
B.S., Georgetown University, 1970; M.S., University of Massachusetts, 1974.

KATHLEEN W. BARBER
Assistant Professor of Physical Education (1960).
A.B., Syracuse University, 1947.

LEE W. BARIC
Professor of Mathematics (1964).
B.S., Dickinson College, 1956; M.Sc., Lehigh University, 1961; Ph.D., 1966.

CHARLES A. BARONE
Instructor of Economics (1975).
B.A., The American University, 1971.

## DANIEL R. BECHTEL

Professor of Religion, Chairman of the Department of Religion (1964).
A.B., Franklin and Marshall College, 1954; B.D., Yale University, 1958; Ph.D., Drew University, 1964. Lindback Award for Distinguished Teaching, 1969-1970.

## JOAN M. BECHTEL

Assistant Professor of Library Resources (1971).
A.B., Wilson College, 1955; M.S. in L.S., Drexel University, 1971.

JOHN E. BENSON
Charles A. Dana Professor of Chemistry (1964).
B.S., The Pennsylvania State University, 1950; M.A., Princeton University, 1953;

Ph.D., 1957.

## PAUL J. BIEBEL**

Professor of Biology (1963).
B.S., University of Notre Dame, 1949; M.S., St. Louis University, 1955; Ph.D., Indiana University, 1963.

## MARIANNA BOGOJAVLENSKY*

Professor of German and Russian Language and Literature (1963).
M.A., University of Helsinki, 1939; Ph.D., University of Pennsylvania, 1959.

Lindback Award for Distinguished Teaching, 1972-1973.

## HARRY F. BOOTH*

Charles A. Dana Professor of Religion (1964).
A.B., Harvard College, 1949; S.T.B., Boston University, 1952; Ph.D., 1963. Lindback Award for Distinguished Teaching, 1966-1967. Ganoe Award for Inspirational Teaching, 1970-1971.

## WILLIAM R. BOWDEN

Professor of English, Thomas Beaver Chair of English Literature (1948).
A.B., Haverford College, 1935; A.M., Duke University, 1937; Ph.D., Yale University, 1948. Lindback Award for Distinguished Teaching, 1974-75.

DOROTHY W. BOWERS
Associate Professor of Library Resources (1967).
B.A., Wilson College, 1963; M.S. in L.S., Drexel School of Library Science, 1967.
*On leave, 1976-77. **On leave, Fall Semester, 1976.

DONALD V. BOWIE
Assistant Professor of English (1969).
B.A., Tufts University, 1967; M.A., The Johns Hopkins University, 1969.

DAVID F. BRUBAKER
Professor of Drama, Chairman of the Department of Dramatics Arts and Speech (1956).
A.B., Franklin and Marshall College, 1948. Lindback Award for Distinguished Teaching, 1967-1968.

## BETH A. BULLARD

Part-time Instructor in Chamber Music (1968).
B.A., Oberlin College, 1956; M.A., Harvard University, 1963.

TRUMAN C. BULLARD
Associate Professor of Music (1965).
A.B., Haverford College, 1960; A.M., Harvard University, 1963; Ph.D., The University of Rochester, 1971. Lindback Award for Distinguished Teaching, 1970-1971.
JAMES W. CARSON
Associate Professor of History (1956).
B.S. in Education, Miami University, 1948; M.A., 1951.

ROBERT W. CAVENAGH, JR.
Director of Instructional Media with the rank of Assistant Professor (1972).
A.B., Princeton University, 1965; M.Ed., University of Virginia, 1970.

DOROTHY H. CIESLICKI
Associate Professor of Library Resources, Chairwoman of the Department of Library Resources (1967).
B.S., Bucknell University, 1946; M.S. in L.S., School of Library Service, Columbia University, 1967.

MARTHA A. CLARK
Instructor of Spanish (1975)
B.A., Wilson College, 1970; M.A., University of Pittsburgh, 1973.

MARCIA B. CONNER
Assistant Professor of English, Chairwoman of the Department of English (1964). B.A., Cornell College, 1947; M.A., Teachers College, Columbia University, 1949.

MARGARET E. CONNERS
Assistant Professor of History (1975).
A.B., College of Saint Rose, 1966; A.M., Boston College, 1968; A.M., Harvard University, 1969; Ph.D., 1975.
STEPHEN B. COSLETT
Professor of Psychology, Chairman of the Department of Psychology and Education (1960).
B.S., University of Pittsburgh, 1953; M.A., University of Denver, 1957; Ph.D., 1960.

DOROTHY W. CULP*
Associate Professor of English (1970).
B.A., Muskingum College, 1952; M.A., University of Pennsylvania, 1956; Ph.D., Columbia University, 1967.
*On leave, 1976-77.

## LAURENCE J. DAVIES

Assistant Professor of English (1975)
B.A., Oxford University, 1963; M.A., 1968; D.Phil., University of Sussex, 1972.

MARY S. DeGRYS
Assistant Professor of Sociology and Anthropology, Chairwoman of the Department of Sociology-Anthropology (1971).
A.B., Georgia Southern College, 1967; Ph.D., The New School for Social Research, 1973.

## WILLIAM A. DEUTSCHMAN

Assistant Professor of Physics (1974).
B.S., University of Washington, 1960; M.S., University of Illinois, 1962; Ph.D., University of Colorado, 1967.

DOUGLAS R. DIEHL
Part-time Instructor in Woodwinds (1973).
B.S., Ithaca College, 1954; M.Mus., Indiana University, 1962.

JOSEPH G. DuCHARME
Associate Professor of Physical Education, Chairman of the Department of Physical Education (1955).
B.S., in Physical Education, Ithaca College, 1948; M.A., in Physical Education, New York University, 1951.

## EDWARD P. DUGGAN

Assistant Professor of Economics (1975).
B.A., University of Maryland, 1967; M.A., University of Wisconsin, 1969, 1970; Ph.D., 1972.
CYRIL W. DWIGGINS
Assistant Professor of Philosophy, Chairman of the Department of Philosophy (1970). B.A., Aquinas Institute, 1955; M.A., 1956.

DAVID B. EAVENSON
Associate Professor of Physical Education (1955).
B.S., Bucknell University, 1954.

BEVERLEY D. EDDY
Assistant Professor of German (1973).
B.A., College of Wooster, 1962; M.A., Indiana University, 1964; Ph.D., 1970.

VIRGINIA J. ELKINS
Instructor of Religion (1973; 1976).
B.A., Dickinson College, 1967; M.A., Andover Newton Theological School, 1969.

LARRY A. ENGBERG
Assistant Professor of Psychology (1973).
B.S., Montana State University, 1968; M.A., University of Colorado, 1972; Ph.D.,
1973.

ROBERT M. ENTMAN
Instructor of Political Science (1975).
A.B., Duke University, 1971; M.Phil., Yale University, 1974.

CARRA A. FERGUSON (O'MEARA)
Assistant Professor of Fine Arts (1973).
B.S., The Pennsylvania State University, 1964; M.A., University of Pittsburgh, 1970; Ph.D., 1974.

FREDERICK P. FERRÉ
Charles A. Dana Professor of Philosophy, Mace Bearer (1962).
A.B., Boston University, 1954; M.A., Vanderbilt University, 1955; Ph.D., University of St. Andrews, 1959.
R. LEON FITTS

Assistant Professor of Classical Studies (1972).
B.A., Baylor University, 1963; M.A., University of Georgia, 1967; Ph.D., The Ohio State University, 1971.

MARJORIE A. FITZPATRICK
Assistant Professor of French (1975).
B.A., College of Our Lady of the Elms, 1957; M.A., Smith College, 1959; Ph.D., University of Toronto, 1968.

DONALD W. FLAHERTY
Professor of Political Science, Chairman of the Department of Political Science (1952).
A.B., Syracuse University, 1943; Ph.D., 1954.

ROLAND G. FLETCHER
Instructor of Military Science (1974).
B.S., Morgan State College, 1965; M.S., Pennsylvania State University, 1969; Captain, Chemical Corps., U.S. Army.

YATES M. FORBIS
Associate Professor of Library Resources (1965).
B.S., Appalachian State Teachers College, 1951; M.A., 1955; M.S. in L.S., Columbia University, 1960.

ARTURO A. FOX
Associate Professor of Spanish (1966).
Bachelor of Letters and Sciences, The Friends School, Instituto Pre-universitario de Holguin (Cuba), 1952; Doctor en Derecho, University of Havana, 1960; Ph.D., University of Minnesota, 1971.

GEORGE FRIEDMAN
Instructor of Political Science (1974).
B.A., City College of the City University of New York, 1970; M.A., Cornell University, 1973.

JAMES C. GALBRAITH
Instructor of Military Science (1974).
B.S., Clarion State College, 1958; Major Quartermaster Corps. U.S. Army.

CLARKE W. GARRETT
Professor of History, Chairman of the Department of History (1965).
B.A., Carleton College, 1956; M.S., University of Wisconsin, 1957; Ph.D., 1961.

WARREN J. GATES
Robert Coleman Professor of History (1951).
A.B., Duke University, 1941; A.M., University of Pennsylvania, 1947; Ph.D., 1951.

JAMES F. GIBSON
Instructor of Military Science (1975).
B.S., University of Maryland, 1965; M.A., George Mason University, 1975; Captain, Infantry, U.S. Army.

WILBUR J. GOBRECHT
Associate Professor of Physical Education (1960).
A.B., Dickinson College, 1952; A.M., Duke University, 1959.

HENRY W. A. HANSON, III
Associate Professor of Geology, Chairman of the Department of Geology (1966).
B.S., University of Alaska, 1960; M.S., The Pennsylvania State University, 1965;

Ph.D., 1968.
WILLIAM A. HARMS
Associate Professor of English (1968).
B.A., Hope College, 1961; M.A., Michigan State University, 1963; Ph.D., Indiana University, 1971.

FRANK R. HARTMAN
Associate Professor of Psychology (1960).
B.S., The Pennsylvania State University, 1953; M.S., 1955; Ph.D., 1957.

CHARLES M. HARVEY
Associate Professor of Mathematics (1972).
A.B., Harvard University, 1961; Ph.D., Stanford University, 1965.

JOHN S. HENDERSON
Associate Professor of French, Director of Off-Campus Studies (1966).
A.B., Bates College, 1961; M.A., Brown University, 1963; Ph.D., 1966.
A. CRAIG HOUSTON

Professor of Economics, Marshal of the College (1956).
A.B., The Pennsylvania State University, 1951; Graduate School for English Speaking Students, University of Stockholm, 1952; Ph.D., The Pennsylvania State University, 1962.

MARVIN ISRAEL
Assistant Professor of Sociology (1968).
B.A., City College of New York, 1959.

BENJAMIN D. JAMES
Richard V. C. Watkins Professor of Psychology and Education (1941).
A.B., Dickinson College, 1934; M.A., Bucknell University, 1936; Ph.D., University of Pennsylvania, 1962.
CHARLES A. JARVIS
Associate Professor of History (1969).
B.A., DePauw University, 1963; M.A., University of Missouri, 1964; Ph.D., 1969.

## KATHRYN M. JAYNES

Part-time Instructor in Flute (1975).
B.Mus., West Virginia University, 1968; M.Mus., University of Wisconsin, 1972.

## WILLIAM B. JEFFRIES <br> Professor of Biology, Chairman of the Department of Biology (1959).

B.S., University of Pittsburgh, 1949; M.A., University of North Carolina, 1952; Ph.D., 1955. Lindback Award for Distinguished Teaching, 1964-1965. Ganoe Award for Inspirational Teaching, 1975-1976.

EDWARD H. JOHNSON, JR.
Professor of Military Science (1974).
B.A., University of Massachusetts, 1957; M.A., Florida State University, 1974; Lieutenant Colonel, Armor, U.S. Army.

JOHN E. JOHNSTON
Assistant Professor of Physical Education (1976).
B.A., Duke University, 1972; M.S., University of North Carolina, 1973.

VYTAUTAS M. KAVOLIS<br>Charles A. Dana Professor of Comparative Civilizations and Professor of Sociology (1964).<br>B.A., University of Wisconsin, 1952; M.A., Harvard University, 1956; Ph.D., 1960.

PAUL E. KAYLOR
Chaplain of the College, Adjunct Professor of Religion (1967).
B.A., Mercer University, 1951; M.Div., Yale University, 1954.

JOHN L. KING
Associate Professor of Accounting, Chairman of the Department of Economics (1959).
B.A., Princeton University, 1948; M.A., University of Denver, 1950.

Ganoe Award for Inspirational Teaching, 1971-1972.

MICHAEL B. KLINE
Associate Professor of French, Chairman of the Department of French (1968). B.A., Rutgers-The State University, 1961; M.A., Brown University, 1962; Ph.D., 1971.

DENNIS S. KLINGE
Assistant Professor of History (1973).
B.A., Amherst College, 1965; Ph.D., Cornell University, 1973.

SYLVESTER KOHUT, JR.
Assistant Professor of Education (1973).
B.S., Pennsylvania State University, 1964; M.Ed., Temple University, 1968; Ph.D.,

Pennsylvania State University, 1971.

HARRY D. KREBS
Assistant Professor of Comparative Civilizations (1972).
B.A., University of Nebraska, 1963; B.D., United Theological Seminary of the Twin Cities, 1966.

## JERI L. KROLL

Assistant Professor of English (1975).
B.A., Smith College, 1967; M.A., University of Warwick, 1968; Ph.D., Columbia University, 1974.

## ARTHUR M. LANDIS

Instructor of Chemistry (1975).
B.S., Elizabethtown College, 1966; M.S., Ohio University, 1970.

## RICHARD M. LANE

Associate Professor of Biology (1967).
B.S., Loyola College, 1959; M.S., University of Maryland, 1963; Ph.D., 1969.

## SHARON A. LATCHAW (HIRSH)

Assistant Professor of Fine Arts (1974).
B.A., Rosemont College, 1970; M.A., University of Pittsburgh, 1971; Ph.D., 1974.

KENNETH L. LAWS
Associate Professor of Physics, Associate Dean of the College, Director of Summer School. (1962).
B.S., California Institute of Technology, 1956; M.S., University of Pennsylvania, 1958; Ph.D., Bryn Mawr College, 1962.

PRISCILLA W. LAWS
Associate Professor of Physics (1965).
B.A., Reed College, 1961; M.A., Bryn Mawr College, 1963; Ph.D., 1966.

## ROBERT E. LEYON

Associate Professor of Chemistry (1969).
B.A., Williams College, 1958; M.A., Princeton University, 1960; Ph.D., 1962.

JOHN H. LIGHT
Professor of Mathematics, Secretary of the Faculty (1959).
B.S., Lebanon Valley College, 1948; M.S. in Physics, The Pennsylvania State University, 1950; M.S., Eng. Mech., 1957.

## PHILIP N. LOCKHART**

Professor of Classical Languages, Asbury J. Clarke Chair of Latin (1963).
B.A., University of Pennsylvania, 1950; M.A., University of North Carolina, 1951;

Ph.D., Yale University, 1959. Ganoe Award for Inspirational Teaching, 1968-1969; 1972-73.
HOWARD C. LONG
Professor of Physics, Joseph Priestley Chair of Natural Philosophy (1959).
A.B., Northwestern University, 1941; Ph.D., Ohio State University, 1948. Lindback Award for Distinguished Teaching, 1975-1976.

JOHN W. LUETZELSCHWAB
Associate Professor of Physics (1968).
A.B., Earlham College, 1962; M.A., Washington University, 1968; Ph.D., 1968.

## LONNA M. MALMSHEIMER

Assistant Professor of American Studies, Director of the American Studies Program (1975).
B.A., The Pennsylvania State University, 1962; M.A., 1965; Ph.D., University of Minnesota, 1973.

## SILVINE S. MARBURY

Assistant Professor of English (1973).
B.A., Bryn Mawr College, 1963; Ph.D., The City University of New York, 1975.

## PETER E. MARTIN

Professor of Mathematics (1965).
B.A., Yale University, 1950; M.A., Harvard University, 1951; Ph.D., 1958.

## ENRIQUE J. MARTINEZ-VIDAL

Professor of Romance Languages, Chairman of the Department of Spanish and Italian (1965).
Licenciado (Filosofia y Letras), Universidad de Barcelona, 1953; M.A., Temple University, 1960; Ph.D., University of Pennsylvania, 1970.

MADELYN C. McDADE MASSEY
Assistant Professor of Library Resources (1970).
B.A., Dickinson College, 1969; M.L.S., Drexel University, 1970.

ANN H. MATHEWS
Part-time Instructor in Voice (1970).
B.Mus., Peabody Conservatory of Music, 1969; M.Mus., 1971.

BARBARA B. McDONALD
Professor of Biology (1956).
B.S., Simmons College, 1948; M.A., Columbia University, 1955; Ph.D., 1957.

## DANIEL J. McDONALD

Professor of Biology (1956).
B.S., Siena College, 1950; M.A., Columbia University, 1952; Ph.D., 1955.
**On leave, Spring Semester, 1977.

CRAIG H. MORGAN
Instructor in Economics (1974).
B.A., Amherst College, 1958; M.A., University of Michigan, 1966.

SING-HUEN P. MORGAN
Instructor in Economics (1974).
B.A., University of Michigan, 1966.

## BRUCE MORTON

Assistant Professor of Library Resources (1976).
B.A., Pennsylvania State University, 1969; M.A., 1973; M.L.S., State University of Geneseo, 1974.

WILLIAM J. NICKEY
Assistant Professor of Physical Education (1966).
B.S., West Chester State College, 1957; M.Ed., 1968.

## PHILIP D. NICOLL*

Associate Professor of Political Science (1970).
B.A., Southern Illinois University, 1965; M.A., 1967; Ph.D., The Pennsylvania State University, 1974.
K. ROBERT NILSSON

Professor of Political Science (1962).
B.A., Temple University, 1951; M.A., The Johns Hopkins University, 1957; Ph.D., Columbia University, 1964. Certificate of the Institute on International and Comparative Law, 1974. Lindback Award for Distinguished Teaching, 1963-1964.
SHARON J. O'BRIEN
Assistant Professor of English (1975).
B.A., Radcliffe College, 1967; M.A., Harvard University, 1969; Ph.D., 1975.

JO ANN OLIVER
Assistant Professor of French (1975).
B.A., University of Washington-Seattle, 1965; M.A., 1967; Ph.D., University of Wisconsin-Madison, 1976.

## MI-YOUNG PARK

Part-time Instructor in Strings (1972).
Artist Diploma, Curtis Institute of Music, 1971.

## PONG-HI PARK

Part-time Instructor in Piano (1969).
B.A., Seoul National University, College of Music, 1965; M.A., Peabody Conservatory of Music, 1966; Artist Diploma, 1967.

CLIFFORD A. PENCE, JR.
Assistant Professor of Mathematics (1969).
A.B., Knox College, 1965; A.M., University of Illinois, 1967.

GERALD J. PETRUCELLI
Assistant Professor of French and Italian (1974).
A.B., Dickinson College, 1964; M.A., University of Wisconsin, 1965; Ph.D., 1970.
*On leave, 1976-77.

FRED C. PETTY
Assistant Professor of Music, Chairman of the Department of Music (1971).
B.Mus., Texas Christian University, 1961; M.A., Cornell University, 1964; Ph.D., Yale University, 1971.

RICHARD A. PFAU
Assistant Professor of History (1975).
A.B., Hamilton College, 1964; M.A., University of Virginia, 1973; Ph.D., 1975.

RICHARD L. POOLE
Assistant Professor of Dramatic Arts and Speech (1972).
B.S., University of Oregon, 1967; M.F.A., University of Portland, 1969.

## J. FORREST POSEY, JR.

Associate Professor of Music (1962).
B.Mus., Hardin-Simmons University, 1951; M.Mus., University of Texas, 1954;
M.A., Harvard University, 1962.

NOEL POTTER, JR.
Associate Professor of Geology (1969).
A.B., Franklin and Marshall College, 1961; M.A., Dartmouth College, 1963; Ph.D., University of Minnesota, 1969.

GEORGE N. RHYNE
Associate Professor of History, Director of the Center for European Studies, Bologna, Italy (1965).
A.B., Davidson College, 1961; M.A., University of North Carolina, 1963; Ph.D., 1968.

## LYNN S. ROBERTSON

Instructor of Psychology (1976).
B.S., Cornell University, 1971; M.S., University of Wisconsin, 1973.

## DIETER J. ROLLFINKE

Assistant Professor of German (1964).
B.S., Rensselaer Polytechnic Institute, 1963; M.A., Columbia University, 1966.

GERALD C. ROPER*
Professor of Chemistry (1962).
A.A., Boston University, 1953; B.A., 1956; Ph.D., 1966.

KENNETH M. ROSEN
Associate Professor of English (1969).
B.A., Cornell University, 1959; M.A., California State University, San Francisco, 1964; Ph.D., University of New Mexico, 1969.
S. NED ROSENBAUM*

Associate Professor of Religion and Classics, (1970).
B.A., Tulane University, 1961; M.A., Brandeis University, 1967; Ph.D., 1974.

EUGENE J. ROSI*
Professor of Political Science, Coordinator of Long Range Planning (1965).
B.A., Syracuse University, 1952; M.A., 1953; Diploma, The Johns Hopkins School of Advanced International Studies (Bologna) 1958; Ph.D., Columbia University, 1964. Ganoe Award for Inspirational Teaching, 1969-1970.
*On leave, 1976-77.

LISA A. ROSSBACHER
Instructor of Geology (1976).
B.S., Dickinson College, 1975.

## J. MARK RUHL

Assistant Professor of Political Science (1975).
B.A., Dickinson College, 1970; M.A., Syracuse University, 1972; Ph.D., 1975.

WILLIAM R. SCHEARER
Associate Professor of Chemistry, Chairman of the Department of Chemistry (1968).
B.S. Ursinus College, 1957; M.A., Princeton University, 1959; Ph.D., 1963.

JOSEPH H. SCHIFFMAN
Professor of English, James Hope Caldwell Chair of American Studies (1958).
B.A., Long Island University, 1937; M.A., Columbia University, 1947; Ph.D., New

York University, 1951. Lindback Award for Distinguished Teaching, 1961-1962.
H. WADE SEAFORD, JR.

Associate Professor of Anthropology (1961).
A.B., Wheaton College, 1946; Graduate Studies, Escuela Nacional de Antropológia e Historia (Mexico), 1948-50; A.M., Harvard University, 1964; Ph.D., 1971.

## HELEN SEGALL

Assistant Professor of Russian (1976).
B.S., Simmons College, 1954; Ph.D., Bryn Mawr College, 1974.

## DONALD R. SEIBERT

Associate Professor of Physical Education (1957).
B.S., George Washington University, 1943; M.A., Columbia University, 1950.

FRANCIS J. SHAY
Assistant Professor of Biology (1974).
B.S., Morehead State University, 1965; M.S., 1968; Ph.D., Virginia Polytechnic Institute, 1971.

## RICHARD M. SHEELEY

Associate Professor of Chemistry (1969).
B.S., University of Utah, 1957; M.S., The Pennsylvania State University, 1959;

Ph.D., Brigham Young University, 1964.
ROBERT D. SIDER
Associate Professor of Classical Languages, Chairman of the Department of Classical Studies (1968).
B.A., University of Saskatchewan, 1955; M.A., 1956; B.A., Oxford University, 1958;
M.A., 1964; Ph.D., 1965. Lindback Award for Distinguished Teaching, 1973-1974.

## RALPH L. SLOTTEN

Associate Professor of Religion (1966).
B.A., Drake University, 1948; B.D., Drake Divinity School, 1951; M.A., University of Chicago, 1958; Ph.D., 1966.

## T. SCOTT SMITH

Associate Professor of Physics (1969).
A.B., Princeton University, 1963; Ph.D., University of Maryland, 1967.

## PETER L. STEINER

Associate Professor of Modern Languages, Chairman of the Department of German and Russian (1969).
A.B., University of Miami, 1962; M.A., University of Pittsburgh, 1967; Ph.D., 1969.

SANDRA L. STITT
Instructor of Physical Education (1976).
B.S., Western Maryland College, 1975; M.Ed., 1976.

JACK R. STODGHILL
Associate Professor of Mathematics, Chairman of the Department of Mathematics (1967).
A.B., Wabash College, 1957; M.S., Purdue University, 1960; M.S., The Florida State University, 1975; Ph.D., Brown University, 1971.

CARL A. STRANG
Assistant Professor of Biology (1976).
B.S., Purdue University, 1973; Ph.D., 1976.

## ANDRÉS SURÍS

Assistant Professor of Spanish (1973).
Licenciado en Derecho, Universidad de Barcelona, 1941; M.A., University of Minnestoa, 1968; Ph.D., 1972.

CANDADAI K. TIRUMALAI
Associate Professor of English (1967).
B.A., Osmania University, India, 1957; M.A., 1959; Ph.D., University of Pennsylvania, 1969. Lindback Award for Distinguished Teaching, 1971-1972. Ganoe Award for Inspirational Teaching, 1973-1974.

WILLIAM W. VERNON
Professor of Geology (1957).
B.A., University of New Hampshire, 1952; M.S., Lehigh University, 1955; Ph.D.,
1964. Lindback Award for Distinguished Teaching, 1966-1967.

## LEE ANN WAGNER

Assistant Professor of Physical Education (1952; 1966).
B.S., The Pennsylvania State University, 1948.

RICHARD H. WANNER**
Professor of Psychology (1946; 1961).
A.B., Franklin and Marshall College, 1939; Ed.M., Harvard University, 1940; Ed.D., 1968.

DAVID L. WATKINS*
Associate Professor of Physical Education (1967).
B.S., The Pennsylvania State University, 1958; M.A., State University of Iowa, 1961.

STEPHEN WEINBERGER
Associate Professor of History (1969).
B.A., Northeastern University, 1965; M.A., University of Wisconsin, 1966; Ph.D., 1969.

[^11]NEIL B. WEISSMAN
Instructor of History (1975).
B.A., Colgate University, 1970; M.A., Princeton University, 1972.

ERIC C. WELLER
Assistant Professor of Fine Arts (1970).
B.F.A., University of Colorado, 1969; M.F.A., 1970.

CANDIE C. WILDERMAN
Instructor of Geology (1974).
B.S., Tufts University, 1968; M.A., Harvard University, 1969.

WILLIAM H. WISHMEYER
Professor of English (1957).
B.A., The Johns Hopkins University, 1948; M.A., 1949; Ph.D., University of Pennsylvania, 1957.
NEIL S. WOLF
Associate Professor of Physics, Chairman of the Department of Physics and Astronomy (1967).
B.S., Queens College, 1958; M.S., Stevens Institute of Technology, 1960; Ph.D., 1966. ISINGARD M. WOODWORTH*
Assistant Professor of Library Resources (1969).
A.B., University of California, Berkeley, 1968; M.L.S., 1969.

LEWIS C. WOODWORTH
Assistant Professor of Russian and German (1968).
A.B., University of California, Berkeley, 1965; M.A., 1967.

MARGARET J. WYSZOMINSKI
Instructor of Political Science (1976).
B.A., Harpur College, 1970; M.A., State University of New York at Binghampton, 1973.

## Faculty Support

JAMES B. DRAKE
Technical Director for the Mermaid Players (1974).
B.A., Dickinson College, 1970.

FRANCIS P. CAVANAUGH, JR.
Assistant to the Professor of Military Science (1976).
B.S., LaSalle College, 1969; Captain, Artillery, U.S. Army.
*On leave, 1976-77.

## DIRECTORY OF COLLEGE SERVICES 1976-1977

## OFFICE OF THE PRESIDENT

## Sam A. Banks

The President of the College, Lemuel T. Appold Foundation (1975).
A.B., Duke University, 1949; M.Div., Emory University, 1952; Ph.D., University of Chicago, 1971; Litt.D., The College of Charleston, 1976.
M. Charles Seller

Presidential Assistant (1975).
A.B., Dickinson College, 1955; M.A., The Pennsylvania State University, 1963.

George Shuman, Jr.
Vice President Emeritus. Development Officer (1935).
Ph.B., Dickinson College, 1937; LL.D., Lycoming College, 1958.
Donald L. Souder
Coordinator of Administrative Computing (1973).
B.S., Lycoming College, 1973.

## DIVISION OF ACADEMIC AFFAIRS

## George Allan

Dean of the College, Russell I. Thompson Chair of the Dean of the College, Professor of Philosophy (1963).
B.A., Grinnell College, 1957; B.D., Union Theological Seminary, 1960; Ph.D., Yale University, 1963. Lindback Award for Distinguished Teaching, 1968-1969.
Kenneth L. Laws
Associate Dean of the College, Director of Summer School, Associate Professor of Physics (1962).
B.S., California Institute of Technology, 1956; M.S., University of Pennsylvania, 1958; Ph.D., Bryn Mawr College, 1962.

John S. Henderson
Director of Off-Campus Studies, Associate Professor of French (1966).
B.A., Bates College, 1961; M.A., Brown University, 1963; Ph.D., 1966.

Ronald E. Doernbach
Registrar (1974).
A.B., Dickinson College, 1965.

Robert W. Cavenagh, Jr.
Director of Instructional Media with the Rank of Assistant Professor (1972).
A.B., Princeton University, 1965; M.Ed., University of Virginia, 1970.

Margaret D. Garrett
Director of Continuing Education (1976).
B.S., Illinois State University, 1957; M.A. Northwestern University, 1971.

Martha C. Slotten
Curator of Special Collections, Archivist of the College (1974).
B.A., Earlham College, 1943; M.A., University of Wisconsin, 1950.

## DIVISION OF EDUCATIONAL SERVICES

Robert A. Barr, Jr.
Dean of Educational Services (1973).
B.A., Swarthmore College, 1956; M.A., University of Pennsylvania, 1961.

Mary Watson Carson
Associate Dean of Special Programs, The George Metzger Chair of the Dean of Women (1968).
B.A., Wichita State University, 1959; M.A., 1960.

Stephen E. Markwood
Associate Dean of Residential Services (1970).
B.S., Bowling Green University, 1964; M.S., 1968.

Maryanne P. Cunningham
Coordinator of Housing and Programs (1973).
B.A., State University of New York at Albany, 1970; M.A., 1971.

Paul E. Kaylor
Chaplain of the College, Adjunct Professor of Religion (1967).
B.A., Mercer University, 1951; M.Div., Yale University, 1954.

Barbara Ann Chaapel
Assistant Chaplain, Women's Counselor (1973).
B.A., University of Delaware, 1970; M.Div., Princeton Theological Seminary, 1973.

Howard E. Figler
Director of Counseling and Placement (1970).
A.B., Emory University, 1960; M.B.A., New York University, 1961; Ph.D., Florida State University, 1968.

William R. Sloan
College Counselor (1972).
B.S., North Carolina Central University, 1971.

Charles L. Twichell
Director of Student Aid (1968).
B.A., Wesleyan University, 1950.

Joseph G. DuCharme
Associate Professor of Physical Education, Acting Coordinator of Physical Activities (1955).
B.S. in Physical Education, Ithaca College, 1948; M.A. in Physical Education, New York University, 1951.
Kathleen W. Barber
Assistant Professor of Physical Education, Coordinator of Women's Athletics (1960). A.B., Syracuse University, 1947.

David B. Eavenson
Associate Professor of Physical Education, Director of Athletics (1955).
B.S., Bucknell University, 1954.

Donald R. Seibert
Associate Professor of Physical Education, Director of Intramural Sports (1957).
B.S., George Washington University, 1943; M.A., Columbia University, 1950.
H. Robert Gasull, Jr.

College Physician (1964).
B.S., Dickinson College, 1953; M.D., Medical College of Temple University, 1957.

Robert A. Hollen
College Physician (1965).
B.A., Pennsylvania State University, 1954; M.D., Medical College of Temple University, 1958.

Harold G. Kretzing
College Physician (1965).
B.S., Albright College, 1955; M.D., Medical College of Temple University, 1959.

Luther M. Whitcomb
College Physician (1960).
B.S., Dickinson College, 1934; M.D., Medical College of Temple University, 1938.

Esther M. Bushey, R.N.
Director, Health Center (1960).

Annette G. Wymond, R.N.
Assistant Director, Health Center (1964).

Annabelle Pangonas, R.N.
Staff Assistant, Health Center (1968).

Nona Westerhoff, R.N.
Staff Assistant, Health Center (1967).

## OFFICE OF ADMISSIONS

J. Larry Mench

Director of Admissions (1974).
B.A., Oberlin College, 1962; M.A., 1963.
R. Russell Shunk

Associate Director of Admissions (1976).
A.B., Lafayette College, 1965; M.A., Lehigh University, 1966.

Laurie A. Theurer
Assistant Director of Admissions (1975).
B.A., Gettysburg College, 1974; M.Ed., The Pennsylvania State University, 1975.

Sharon T. Martin
Assistant Director of Admissions (1975).
A.B., Franklin and Marshall College, 1975.

DIVISION OF BUSINESS AND FINANCIAL AFFAIRS
John W. Woltjen
Treasurer (1970).
B.S., Moravian College, 1959.

Barry L. Gaal
Business Manager (1971).
B.S., Moravian College, 1961.

Robert W. Belyea
Comptroller, Assistant Treasurer (1968).
B.A., Colby College, 1951.

William C. Werner
Assistant Comptroller (1974).
B.S., Shippensburg State College, 1968; M.E., 1970.

Robert H. Rasch
Director of Personnel and Summer Conferences (1973).
B.S., University of Rhode Island, 1965; M.B.A., Western New England College, 1973.

Howard G. Baum
Director of Holland Union-College Bookstore (1964).
A.B., Dickinson College, 1950.

George L. Eurich
Director of Physical Plant (1970).
Wayne M. Modny
Director of Food Services (1974).
Ernest E. Talbot
Supervisor of Campus Security (1971).

## DIVISION OF COMMUNICATIONS AND DEVELOPMENT

Leonard G. Doran
Executive Director of Communications and Development (1973).
B.A., Harvard University, 1942; M.A., George Washington University, 1949.
J. Brooks Jones

Associate Director of Development (1974)
B.A., West Virginia Wesleyan College, 1962.

George F. Stehley
Director of Alumni Relations and Alumni Secretary (1970).
A.B., Dickinson College, 1962.

Joseph J. McHugh, Jr.
Director of Planned Giving (1974).
B.S., Villanova University, 1958; M.B.A., University of Pennsylvania, 1964.

Phyllis C. Dunlop
Assistant Director of Annual Giving (1976).
A.B., Dickinson College, 1973.

Nancy Lee Winkelman
Director of Publications (1975).
B.A., Western Maryland College, 1951; M.Ed., 1969.

John E. Ross
Director of Public Information Services (1976).
B.S., East Tennessee State University, 1969.

Jeffrey H. Wiles
Assistant News Director (1973).
B.A., Shippensburg State College, 1972.

## Central Pennsylvania Consortium

Arden K. Smith
Director, Central Pennsylvania Consortium
B.A., Antioch College, 1955; M.A., San Francisco State College, 1959; Ph.D., Stanford University, 1969.
Lee A. P. Feltwell
Assistant Director, Central Pennsylvania Consortium
B.A., Wilson College, 1967; M.Ed., West Chester State College, 1970.

## PARENTS ADVISORY COUNCIL

The following is a list of Dickinson's Parents Advisory Council members. These are parents who serve as liaison between the College administration and the general parent body. They have agreed to act as informal admissions representatives of Dickinson. Please feel free to contact any person on the list if you desire more in-depth information about the College from a parent's perspective.

## CONNECTICUT

Green's Farm
Thomas S. White, Jr.
Greenwich
Shaw Mudge
Robert H. Myerhoff
Nathan R. Owen
Weston
Edmond P. Cadoux
Andrew H. Neilly, Jr.
Westport
Warren C. Rossell
Wilton
Lewis M. Mithun

DELAWARE
Wilmington
Thomas C. Shea, Sr.

## DISTRICT OF COLUMBIA

Robert C. Holland

## FLORIDA

Coral Gables
James A. Logue

HAWAII
Honolulu
John W.A. Buyers
MAINE
Wellesley Hills
Lewis H. Parks

## MARYLAND

## Baltimore

Jeston Hamer, Sr.
Cockeysville
Eli Breger
Columbia
Mrs. Siegfried Rowe
Kensington
Jay Constantine
A. Robert Sadove

Rockville
Betty S. Levinson
Ruxton
John C. Ruxton

## NEW JERSEY

Chatham
Lawrence E. Horner
Convent
Mrs. Roger E. Egan
Montclair
Walter M. Sanders
Oradell
Seymour Baron
Princeton
J.R. McAllister Borie

Mrs. Dorothy R. Colman
Short Hills
John S. Chalsty
Springfield
Mrs. Howard Kaplan

## Summit

Henry Keller
William J. Schindele
Robert W. Trone

## NEW YORK

Bronxville
Charles L. Copenhaver
Brooklyn
Mrs. Arnold M. Heller

## Chatham

Thomas C. Richards
Douglaston
Howard Grimm

## Freeport

Thomas A. Dillon, Jr.

## Harrison

Richard Abrons

## Huntingdon

Mrs. David Birnham
Irvington
James D. Atwater
Manhasset
Irving Goldman
New York
Mrs. Dikran P. Donchian
George A. Hyman
Scarsdale
William C. Nagle
Richard Willstatter
Schenectady
John J. Flax
Yorktown
Robert Lee Degnan

OHIO<br>Dayton<br>Leonard M. Perryman<br>\section*{PENNSYLVANIA}<br>Ambler<br>Mrs. Robert L. Ervin<br>Berwyn<br>James R. Derrick<br>Mrs. F.H. McIlvain<br>California<br>Oliver N. Hormell<br>Chicora<br>John A. Beck, Jr.<br>Elkins Park<br>Mrs. David Perelman<br>Glenside<br>Richard Jenkins<br>Greensburg<br>James H. Thomas<br>Haverford<br>Davis R. Parker<br>Jenkintown<br>Mrs. David Zuckerkandel<br>Johnstown<br>Rayford A. Robel<br>William G. Shahade<br>Langhorne<br>Mrs. William Morrow<br>Latrobe<br>Christian F. Moersch, Jr.<br>Lafayette Hills<br>Donald R. Ziegler

## Malvern

Dale Tyson, Jr.
Millersville
John R. Long, Jr.
New Hope
Edward J. Dougherty
Northumberland
John B. Apple
Orwigsburg
John E. Jones, Sr.
Philadelphia
Irwin Nat Pincus
Frederico Talley, Sr.
Pittsburgh
Robert L. Baker
Carl H. Kalberkámp
Radnor
William A. Slugg
Sewickley
William D. McGuiness
Villanova
Roy T. Peraino
Wexford
John G. Hamilton
Wormleysburg
Hervey W. Froehlich
Wyncote
Eugene A. Snyder
Yardley
Louis Weinstein
PUERTO RICO
Guaynabo
Edward D. Schwartz

## CANDIDATES FOR DEGREE

Commencement, May 16, 1976

## BACHELOR OF ARTS

Peter Eric Abrons
John Charles Andrews
Jan Tyler Andrus
Carolyn Angelo
*Jennifer J. Angier
Katherine Ann Archer
Nancy Jamison Armstrong
Margaret Dena Arrison
Ida Norman Ashburn
Leslie Jan Bachus
David Warren Backus
**Paul Joseph Baisley. Jr.
Cynthia Anne Barnes
Robert Raymond Barolak
Richard Mark Baron
Jennie Claire Bartlett
Marsha Ann Basco
Daniel Eugene Basehoar
*John Albert Beck. Jr.
Peter Stephen Bejsiuk
Joern Beneke
Stephanie Bennett
Emily J. Berk
Kenneth Jay Berman
Marylee Sternoff Beyer
Stephen S. Birnkrant
Eloise Palmer Biscoe
**Jean Kristin Blanken
**David Cooper Blee
Daniel Joseph Bloom
Ellen L. Bombalski
Jean Kathryn Daniels Booth
Rebecca Joan Borel
**Anne Palmer Bowers
Sarah B. Bowker
Helen Elizabeth Brand
Joseph Raymond Brennan
Stuart Deardorff Broberg
George Steven Brody
Johnny Ray Brown
Donna Brutto
Anna Regena Bryan
Margaret Clover Bump
Elsie Parkhurst Buyers
Annamarie Cammarata
Karen Elaine Campbell
John A. Carlin
Thomas Gemmell Carruthers
Patrick Vincent Cassidy
Susan Elizabeth Chase
Anne Giddings Chesnut
Richard Alexander Christie
Mariann Theresa Ciampa
Richard Ward Coates
S. Kevin Colman
**Laura Lee Alcott Connell
Martin Bancroft Copenhaver
Wendell Victor Courtney
William Aden Cover. Jr.
William Robert Craig
Michael James Curran
Keith M. Curtis
**Diane Cyburt
Candace May D'Agostino
Michael Isaac Dane

Katherine J. Danser
Edward Wilson Davis
**Christopher Burchard Day
Ellen Joan Dealtrey
Kenneth Eric deGroot
Barbara Jane Demos
Beth Ellen Dennett
**Robert A. Diamond
Susan Dierdorf
Jeffrey Eugene DiIuglio
Charles Harvey Dissinger, Lr.
Maria Elena Dominguez
Keith Dennis Doubt
Nancy Whittier Dudley
*Barbara Steffen Dugan
Jean Fairbairn Eadie
Kenneth William Earll
Steven Gallen Edersheim
George Lincoln Edson
Mary Jo Egan
Gregory Blair Elbin
Steven Carll Elwell
Sandra L. Emrey
Bradley David Eslinger
Karen Michele Faulds
Kathryn Felver
James Vincent Ficco, III
**Deborah Waldron Finn
**Robin Jane Fischer
Richard Alan Fisher
Nancy Joan Fox
Marla Joy Freedman
Robin Kathleen Freedman
John Daniel Funkhouser
William Richard Furedy
Gary Harris Gale
**Gregory Lansing Gaskin
Gary Marshall Gavenus
Sallie Marguerite Gaynor
Ellen Geers
**George Charles Geisler, Jr. Daniel Marc Gerofsky
Frank Anthony Gerolamo
**Jane Rowan Gilmore
Mary Douglas Glasspool
Edwin George Glorius
Lisa Sperling Goetz
*William David Goldberg
Jerald Lee Goldfine
Stuart Miles Goldman
Linda Gail Goodman
Leslie Rae Goodrich
Michael Stewart Goodwin
Tomi Cunningham Gottschall
Nancy Louise Graham
*Steven Vance Greenstein
**Michael Paul Gregorowicz Leni Fran Gross
Wilhelm Louis Gruszecki
Daniel Robert Guida
**Christopher Gulotta
**Karen Louise Hadley
Mary Frances Haines
Douglas William Hall
Wesley Samuel Hamilton, III

James Ryder Suydam Hayden
Keith Hayden
Paul Helman
Richard Baldwin Hendrick, Jr.
Michael James Henny
Charles Anthony Hewitt
Sandra Lee Hickok
Thomas Stanley Heirs
Rosanne Joan Hildebrandt
Rodney Hill
Deborah Banks Hillyer
*Joan Carol Hochuli
Sharon Mara Hogan
Angela Maria Holden
*David L. Hollinger
Stephanie Anne Horoschak
Brian Graham Howell
Judith B. Hughes
Clinton Cleveland Hummel
Terry Sue Hyman
**Harold S. Irwin III
Donald Gregory Johnson
Michael Lewis Johnson
Roberta L. Johnson
Michael Joseph
**Peter Lewis Joseph
Stephen Harris Joseph
Barry Frank Kahan
Thomas Llewellyn Kalaris
Michael David Kaplan
Joseph Steven Karas
Tamara Rose Karpie
Cathy Lisa Kazan
Thomas Patrick Kennane
Byry Daniel Kennedy
Deborah Lee Kerr
Peter Kellogg Kimball
Carol M. King
Charles Lee Kinzer
Judith Diane Kisloff
Harriet Ashley Kistler
David Charles Knauss
Robert Winfield Koehler
Barbara Rae Kriebel
**Clausen Joseph Krzywicki
David Gerard Lambert
*Irina Lapin
Martin Leonard Laven
Mark Steven Lavin
*Francesco Carlo Leboffe
John F. Leboffe
**Joan Elizabeth Leckie
Allena Marie Lee
David Michael Lefever
Jacqueline Theresa Leff
Richard Anthony Lepidi
Jay Steven Levins
G. Griffith Lindsay, III

Donald J. Liskay
Linda Louise Locher
David William Long
John Robert Long, III
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## DICKINSON COLLEGE CALENDAR

## Fall 1976 Semester

Freshmen Orientation Begins-Sunday, August 29
Registration-Wednesday, September 1
Convocation-Wednesday, September 1
Classes Begin-Thursday, September 2
Last Day to Add Courses-Tuesday, September 21
Last Day to Drop Courses-Tuesday, September 21
Last Day to Change From or To Pass/Fail-Tuesday, September 21
Parents Day-Saturday, October 9
Roll Call and Last Day to Drop In Level-Friday, October 15
Homecoming-Saturday, October 23
Pre-Registration for Spring 1977 Semester-Week of November 8
Thanksgiving Vacation-5 P.M. Tuesday, November 23 to 8 A.M. Monday, November 29
Classes End-5 P.M. Friday, December 10
Reading Period-Saturday, December 11 through Tuesday, December 14 Final Examinations-Wednesday, December 15 through Monday, December 20 All Grades Due-NOON, Monday, January 3, 1977

## Spring 1977 Semester

Registration-Tuesday, January 18
Classes Begin-Wednesday, January 19
Last Day to Add Courses-Tuesday, February 8
Last Day to Drop Courses-Tuesday, February 8
Last Day to Change From or To Pass/Fail-Tuesday, February 8
Roll Call and Last Day to Drop in Level-Friday, March 4
Spring Vacation-5 P.M. Friday, March 11 to 8 A.M. Monday, March 21
Pre-Registration for Fall 1977 Semester-Week of April 4
Classes End- 5 P.M. Friday, April 29
Reading Period-Saturday, April 30 through Tuesday, May 3
Final Examinations-Wednesday, May 4 through Tuesday, May 10
Grades Due: Seniors-NOON, Wednesday, May 11
Commencement-Sunday, May 15
Grades Due: All Other Students-NOON, Monday, May 16

## 1977 Summer School Calendar

First Short Session-Thursday, May 26 through Wednesday, June 15
Second Short Session-Friday, June 17 through Friday, July 8 Regular First Session-Tuesday, May 31 through Friday, July 8 Regular Second Session-Tuesday, July 12 through Thursday, August 18


Dickinson College
Carlisle, Pa. 17013
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[^0]:    * Participation in the India Semester will meet this requirement.
    ** When offered on a non-western topic.
    *** Or the Self-Developed Major (See page 136).

[^1]:    * On leave Fall 1976.

[^2]:    * On leave 1976-1977.

[^3]:    * Not granted credit by examination.
    ** On leave 1976-1977.

[^4]:    * On leave, 1976-1977.

[^5]:    * On halftime leave, 1976-1977.

[^6]:    * On leave 1976-1977.

[^7]:    * The term 'discipline" shall be understood to mean any academic program which offers either a major or a minor.

[^8]:    * Changes in Regulations: The College reserves the right to change its regulations, courses of study, and schedule of fees without previous notice to the student.

[^9]:    * Credit/No Credit class sections must be approved by the Academic Standards Committee. All students in these sections must receive one of these two grades and thus the grade is not the student's option. The grade of No Credit appears on the student's transcript, beginning with the Fall 1975 Semester.
    ** "Satisfactory" is a temporary, non-credit grade given until the second semester of a one-year course is completed, or until Independent Study or Research is completed.

[^10]:    * The date of first appointment to the College appears in parentheses at the end of each individual's title(s).
    ** Faculty emeriti are listed according to the highest rank an individual achieved prior to his or her retirement, and then according to the year he or she achieved that rank. When more than one emeritus professor have the same rank at the time of retirement, and achieved that rank on the same date, they are listed according to the year each achieved his or her preceding rank.

[^11]:    *On leave, 1976-77.
    **On leave, half-time 1976-77.

